Ms. Neily Mattress NPR March 23, 2005 Page 2 of 4

products to be manufactured and sold. We still contend a 60-minute open-flame test would save far more lives. NASFM regards the 30-minute test period as sufficient for alert and able-bodied persons to escape a mattress fire. The proposed test, however, is insufficient in meeting the goal to improve the survivability of our most vulnerable citizens – the physically challenged, very young and very old.

New research from the Department of Homeland Security's Federal Emergency Management Agency (FEMA) confirms earlier findings on the dire need for more escape time for toddlers and the elderly. FEMA finds children under age five and those older than age 54 are at the greatest risk of death in fires. The research indicates children under five need additional time to escape a fire because they can't do it independently, while those over age 54 have a multitude of issues affecting their response time, including mental/physical frailties, higher alcohol usage, greater use of medications and higher smoking rates.

Some promising developments are occurring. Underwriters Laboratories (UL) reports that mattress producers are now subjecting their products to the open-flame testing because of California's Technical Bulletin 603 (TB 603) and the imminent federal standard. UL finds many manufacturers are satisfying the criteria of the test for times longer than 30 minutes, and some for longer than an hour. The precision and bias test report for TB 603 also recommends conducting the test for 45 minutes to meet the safety margin of California's new regulation.

2. States should maintain the right to implement stricter levels of open-flame testing.

States are beginning to join the effort to promulgate a stronger open-flame fire test for mattresses, with the New Jersey Senate and Assembly considering proposed legislation that would implement a 60-minute test. We believe other states should be able to follow suit. We are concerned by statements made at the March 3 public meeting by Ryan Trainer, Executive Vice President and General Counsel of the International Sleep Products Association (ISPA), that the Commission should make clear that the proposed standard preempts state requirements that address mattress flammability risks. States should be able to determine their own regulation to ensure the safety of their citizens. Section 16 (b) of the Flammable Fabrics Act, the Act under which this proposed mattress open-flame standard was issued, clearly specifies that States may, under certain circumstances, establish flammability standards that provide a higher degree of protection to the public.

The fact that this proposed open-flame rule is based on work from the state of California (TB 603) further reinforces this principle and proves that states can be the

¹ U.S. Fire Administration. The Fire Risk to Older Adults/The Fire Risk to Children. December 2004.

http://www.usfa.fems.gov/statistics/reports/pubs/tfrs.shtm

Ms. Neily Mattress NPR March 23, 2005 Page 3 of 4

innovators in ensuring fire-safe products. Stifling them just when they are getting started in this very important endeavor seems to be extremely counterproductive.

3. Durability tests prior to administering the fire performance test would improve fire safety.

At the public meeting, NASFM was pleased to hear the testimony from Shawn Baldwin of the Felters Group, located in Roebuck, South Carolina, who called attention to the fact that the proposed rule does not properly address product durability. This includes the introduction of various types of liquids to the mattress and research into the migration of the chemical treatment over time.

Al Klancnik of Serta International estimated at the meeting that the average use of a mattress is between 7-10 years, but said many mattresses are commonly in use up to 40 years. With estimates this high, meeting some reasonable durability criteria would help ensure that mattresses maintain their fire safety rating for longer periods of time. Most mattress manufacturers already conduct thorough durability testing. For example, Serta requires its bedding to pass a 10-year rollator testing of the box springs, and liquid testing that has proven the durability of the fire-retardant chemicals. Serta has made impressive strides with the open-flame testing as well, announcing that all of its mattresses sold after January 2005 are TB 603 compliant. NASFM encourages the CPSC to take the logical next step and include language in the new regulation for the industry to combine the durability and fire safety tests.

4. Elimination of the smoldering ignition standard is dangerous, because these fires are capable of generating potentially deadly quantities of carbon monoxide.

All of the panelists at the public hearing supported the ISPA recommendation for CPSC to contemplate ending the cigarette-ignition standard, because they thought that the new open-flame requirements would in effect make it redundant and unnecessary. However, as ISPA admitted at the meeting, there is no empirical data to prove that the cigarette regulation would become obsolete. ISPA's representative said research was currently being compiled by industry to support the elimination of the cigarette test.

A discussion about the fate of the cigarette-ignition requirement is not appropriate to this rulemaking, because it is a separate regulation and therefore would require its own rulemaking process. If such an action were contemplated, we would encourage CPSC to conduct its own in-depth research to determine whether the new test truly makes all aspects of the current regulation obsolete. We are of the understanding that cigarette and open-flame ignitions pose very different hazards, and the ignition process between smoldering and open-flame sources differs in ways that may not be adequately represented by a single test method.

Ms. Neily Mattress NPR March 23, 2005 Page 4 of 4

5. A recognizable mark from accredited independent testing laboratories would improve enforcement of noncompliant manufacturers.

The mattress industry, including ISPA and Serta, are beginning to express concerns about imported mattresses, while still drawing attention to the continued problem domestically of non-compliant mattresses, usually renovated or remanufactured products. We support ISPA in its effort to ensure that the new open-flame test regulation clarify the responsibilities of renovators and guarantee that imported mattresses and foundations are subject to the same requirements as domestically made products. We believe this can be accomplished by devising a recognizable mark from accredited independent testing laboratories. This would be an easy way for customs and fire safety enforcement officials to determine if imported or domestic mattresses are made properly. The mark could also fulfill a proposal from Baldwin at the public meeting to have a consumer-warning label regarding the existence of any known hazardous materials contained in the mattress structure.

We hope the CPSC will seriously consider our suggestions regarding this regulation. In summary, NASFM supports the new test method, as well as the pass/fail criteria of the 200 kW peak heat release. We commend the Commission for going a step beyond TB 603 and requiring a 15 megajoules (MJ) total heat release requirement, instead of the 25 MJ total heat release requirement in California. We are encouraged by industry leaders' claims that they can already meet the stricter regulation, but also recognize the importance of independent third party validation of such claims.

We sincerely appreciate the Commission's hard work in devising the proposed openflame test requirement for mattresses. We look forward to continuing to work with you on a standard that will protect all of our citizens, including the most vulnerable.

> 1

Sincerely,

J. William Degnan, Chairman

Consumer Product Safety Task Force

cc: NASFM Board

Mather

Page 1 of 1

505

Stevenson, Todd A.

From: Vince Diaz [vince@atlanticthread.com]

Sent: Wednesday, March 23, 2005 2:48 PM

To:

Stevenson, Todd A.

Subject: Public Comments 16CFR Parts 1633 and 1634/Retransmit

March 21, 2005

OFFICE OF THE SECRETARY US CONSUMER PRODUCT SAFETY COMMISSION Washington, DC 20207

The attached comments are in response to 16 CFR Parts §1633 and §1634, Part II Consumer Product Safety Commission, dated 13 January 2005.

As a specialty supplier of high performance components used in the manufacture of various flame resistant products for 25 years, I believe that our company is qualified to provide information that is relevant.

The topics discussed reflect the views of our company and are supported by the collective experience of our technical staff.

Our technical staff has participated in the development of consensus performance specifications and test methods, for flame resistant textile products, developed by ASTM, NFPA, ANSI, and US ARMY NATICK. They have also worked with a number of barrier fabric suppliers to develop some of the items detailed in these comments.

We fully support your efforts to improve the safety of mattresses and anticipate that these comments are valuable in helping the CPSC to achieve that end.

Sincerely yours,

Vincent Diaz President SUDI SCULL MFT, C.N.

Psychotherapy

Nutritional Counseling

Mathie

1.

March 7, 2005

To Whom It May Concern:

I am both a Certified Nutritionist and a Licensed Marriage and Family Therapist and my speciality is the mind/body connection. My clients come to me with many physical symptoms including asthma, insomnia, migraine, autoimmune disease and learning disabilities. I work from a multi-level psychological and nutritional approach but removing fire retardant mattresses and pillows from my clients' sleep environment is often instrumental in eliminating their symptoms. All fire resistant chemicals are carcinogenic, have been linked with cancer and ALL of these chemicals continuously outgas no matter how many linings are sandwiched around them. Sleep should be an eight hour interval in a chemical free oasis, not a time to substantially increase your chemical overload with fire retardant chemicals.

Smoking has adverse affects on our health, so much so that the government more and more has banned smoking in most public places. Therefore it seems unfair for the public majority to have to be exposed to chemicals that protect an unhealthy minority that might fall asleep with a burning cigarette. This minority is already not taking the steps to protect itself, by abstaining from this nasty addiction to begin with.

I strongly encourage mattresses to be manufactured WITHOUT FLAME RETARDANT BY LAW. The best consumer protection might be to offer a market choice between chemical and non-chemical mattresses.

Thank you for you close attention to this matter.

Sincerely,

Sudi Scull

Car Barrell

78 Peralta Street San Francisco, CA 94110 MFT# 36910 415 282 8185

Molling

507

From: Sent: Sara Torrey [storrey@nycap.rr.com]
Thursday, March 24, 2005 11:05 AM

To: Subject: Stevenson, Todd A. Mattress NPR

I am writing to add my concerns to the many others I hope you have received regarding the new regulations for mattresses. Using chemicals that are harmful to many won't prevent those stupid enough to smoke in bed from hurting themselves by igniting their pajamas or bed linens. Why take the risk of hurting millions through exposure to these chemicals. And remember...it is not just our current population who will be hurt, but that of future generations due to the risks for reproductive problems from these chemicals. Please don't go forward with this.

Sara Torrey Ballston Spa, New York

From:

Duane [dmcmaxx@earthlink.net]

Sent:

Thursday, March 24, 2005 11:00 AM

To:

Stevenson, Todd A.

Subject: Mattress NPR

Dear Sirs:

It is extremely reckless for the government to mandate adding chemicals to every mattress so they won't burn. I use the term "reckless" because apparently government agencies don't even check with other government agencies (The EPA has identified health concerns about many of the products which must be used to pass inflammability standards).

If you want to expose yourself to such chemicals 8 hours a day fine, but don't make me and my loved The matter of chemicals being forced upon us by injecting them into our food and other consumer products is killing us! It doesn't matter whether the intent is good. The probability is that more people are likely to be harmed by this than benefited. AND BESIDES THE ROLE OF GOVERNMENT IS NOT TO PROTECT US FROM ACCIDENTS!

PLEASE DON'T EXPOSE 300 MILLION TO UNSAFE CHEMICALS TO PROTECT 300 ACCIDENT VICTIMS!

Duane McMurdie

--- dmcmaxx@earthlink.net



National Fire Protection Association

Phone: 202-488-4428 • Fax: 202-488-4452 • www.nfpa.org

Washington Office, 499 South Capitol Street, SW, Suite 518, Washington, DC 20003

March 9, 2005

Office of the Secretary Consumer Product Safety Commission Bethesda, Maryland 20207

Re: Mattress NPR

Dear Mr. Secretary:

I am writing on behalf of the National Fire Protection Association (NFPA) in support of the Consumer Product Safety Commission's January 13, 2005 Notice of Proposed Rulemaking on Standard for the Flammability (Open Flame) of Mattresses. NFPA has supported your work on mattresses, which has been progressing through the rulemaking process. We fully support your current NPR for mattresses.

As you know, the CPSC has a current mattress flammability standard for ignition by cigarettes. Even with the NPR for open flame ignition of mattresses, it is appropriate to leave the existing standard intact, because cigarettes continue to account for the largest share of mattress and bedding fires (25% in 1994-1998) and related deaths (44%). The primary small open-flame sources, lighters, matches, and candles, account for a combined 38% of mattress and bedding fires and 23% of related deaths, which means this is a large enough fire problem in its own right to justify the proposed action. According to NFPA statistics, in 1994-1998, there were an estimated 24,500 total reported fires where mattresses and bedding are the first to ignite. These fires result in an annual average of 508 civilian deaths, 2,555 civilian injuries, and over \$320 million in property damage.

We appreciate an opportunity to comment on this important matter. We also commend you for your work on this and all consumer safety issues. NFPA is prepared to assist the CPSC in carrying out its responsibilities with respect to mattresses flammability. Please contact us should you need any further information.

Sincerely,

John C. Biechman Vice President

Government Affairs

Wm. T. Burnett and Co.

FIBER DIVISION

2550 West Front Street Statesville, NC 28677 Tel: 704.872.2477

Fax: 704.871.3375



22 March 2005

Office of the Secretary Consumer Product Safety Commission Room 502 4330 East - West Highway Bethesda, Maryland 20814

301.504,7530

Mattress NPR

Dear Sirs:

In accordance with your rulemaking policy on mattresses, I would like to file the following comments.

- 1) Express our concern about non durable FR Barriers.
- 2) Concerns about testing beds in triplicate.

As the commission is aware, on 9 March 2005 a voluntary recall of some of Shaw Industries carpet was called for. This was brought about by inconsistencies in applying the topical coating.

Many of the barriers offered in California today to meet their 603 Standard are non-durable, topical barriers. Of the 7 barriers that I picked up on a recent trip to California 5 were non- – durable. A DVD that is enclosed shows and explains the testing of these barriers.

Three samples of each barrier were tested. There is a control sample, which was not exposed to water. A sample that had 200 CC of water poured onto it one time and a third sample that had 200 CC of water poured onto it 3 times. The differences following the burn are eye opening and scary.

Therefore, I ask the commission to not allow non durable FR Barriers in beds.

My second concerns the commission's requirement that beds are to be tested in triplicate. As you are aware most bedding manufacturers are small businesses. There are several thousand of these small manufacturers nationwide.

Building 3 sets of bedding and then burning it at an approved testing lab, at a testing cost of approximately \$400.00 per test, will add up quickly. The total cost for each type of bedding will approach on average \$1,000.00 per test. For a total of nearly \$3,000.00 per set, for testing in triplicate.

I feel that this is a heavy burden to place on the small manufacturer.

Having tested nearly 300 sets of bedding and having met with several hundred manufacturers, I would like to propose the following.

That if the peak heat release for the 30-minute test does not exceed 50 kW, that only one test is required.

If a bed meets these criteria, the manufacturer is using a good barrier and he obviously knows how to properly apply the barrier and build a safe bed.

Should any questions arise regarding these comments, please call me anytime. Our office number is 704.500.3542 and my mobile number is 704.500.3542.

I thank you for your considerations.

Sincerely,

Tim McRee

From:

Randy Klecka [rjjjl@paxway.com]

Sent:

Saturday, March 26, 2005 10:14 AM

To:

Stevenson, Todd A.

Subject: Potential Spam: Mattresses

Dear Sir or Madam,

We are concern about the new law regarding the new fireproof matresses which will be treated with toxins to prevent fire. What effect will this have on our young children? Please do not pass it. Thank-you. Sincerely, Randy and Janna Klecka

Malta

51a

From:

kmci [kmci@chicopee.com]

Sent:

Saturday, March 26, 2005 9:33 AM

To:

Stevenson, Todd A.

Subject:

Potential Spam: comments re proposed open flame mattress standard

Gentlemen:

Brief comments regarding proposed Open Flame Standard.

Our factory is small; just at \$600,000 per year.

Compliance with 16CFR part 1632 was not a problem for us.

The proposed Open flame Standard is presenting some challenges. We followed the Cal.TB603 for three years to try to stay abreast of developments.

At present, the avaiabilty of raw materials and machinery are not a problem although cost will be much higher.

Product development and testing on a timely basis may be the big road-block. At present there are eight(8) commercial testing labs with the NIST dual burner capabilty. Three(3) are with-in reasonable shipping range of our plant. We have just started to gather information on costs of the test and turn-around time. This is the key to qualify product for market.

and carn around ormovines to the neg or quamer, permane and another

Quality assurance after proto-type acceptance will be much more stringent and costly for small manufacturers.

The proposed Open Flame Standard is a good thing and these are not complaints or excuses, however, small plants like us will have some daunting problems to become fully compliant.

Thank You:

John Krupczak KMCI Sleep Products, Mass.

Malker

5/3

From:

dillingh@email.unc.edu

Sent:

Sunday, March 27, 2005 9:01 PM

To: Cc: Stevenson, Todd A. Laura Davis@unc.edu

Subject:

proposed adoption of California mattress law

Re: proposed adoption of California's Technical Bulletin 603

Dear Mr. Stevenson:

As a member of the public, I am NOT in favor of the federal adoption of the proposed legislation on new flammability standards for mattresses. As a parent, I am much more concerned with the possible health effects of chemical flame retardants that mattress manufacturers may use than I am with risk of injury or death from fire. Millions of people, especially young children, may be adversely affected by long term exposure to these chemicals.

Passage of this law would likely result in an increase in already unacceptable levels of chemical flame retardants in mattresses, with no disclosure to the consumer. Currently there is no labeling of mattresses that tells you what chemicals or materials have been used to make them flame retardant. It is extremely unfair to consumers to allow us no way to discern and choose among bedding products based upon factors such as chemical content. Since no one in my household smokes cigarettes and we accept responsibility for ensuring that no one exposes a mattress to open flames through use of candles, lighters or any other flame or heat source, we should have the option to select a mattress based upon health concerns other than potential flammability.

My family has actually delayed the purchase of a new mattress for several years due to concerns about mattress content and lack of information available from mattress manufacturers. The proposed legislation will only make it more difficult to find an acceptable product. We'll lose sleep over this!

Sincerely,

Laura Davis, MPH

>Send comments to Todd Stevenson, director, Office of the Secretary, >U.S. CPSC, Washington, D.C. 20207.

Matthews 514

From:

Nomi Orr [n@joelorr.com]

Sent:

Monday, March 28, 2005 12:19 AM

To: Subject: Stevenson, Todd A. FLAME RETARDANT

To Whom It May Concern:

We recently bought two mattresses. When they were unwrapped, my wife ran from the room, saying, "Get rid of them! They smell like bug spray."

I put them out on the porch for a few weeks, then brought them in and made them up. When my wife came into the room, she again fled. So I unmade the beds and returned them to the store.

Later, while arranging the sheets from those mattresses in the washer to get the terrible smell out of them, my wife almost fainted. Whatever was in those mattresses was terribly toxic. It obviously affects some people more than others. Or perhaps some people are better noticers of what is going on than others.

That is, if it's not good for human health, everyone would be affected, but not everyone would notice the connection between the smell and how they feel.

So please leave mattresses as they are. If something needs to be done to protect smokers, put a big label on the mattress. If something needs to be done to protect people in fires, I don't believe sitting on a flameproof mattress will help if the fire is that close.

Thank you for taking this into consideration.

Sincerely, Dr. and Mrs. Joel N. Orr Chesapeake, Virginia joel@joelorr.com



March 28, 2005

Office of the Secretary
ATTN: Todd Stevenson
Consumer Product Safety Commission
Washington DC 20207-0001

Reference: MATTRESS NPR (Notice of Proposed Rulemaking)

Dear Mr. Stevenson:

Ventex, Inc. accepts the Consumer Product Safety Commission's invitation to comment on the Notice of Proposed Rulemaking (NPR) for a new Standard for the Flammability (Open Flame) of Mattresses and Mattress Foundation Sets as published in the Federal Register on January 13th, 2005 (pages 2469-2514).

For more than a decade, Ventex, Inc. has manufactured fire barrier fabrics designed to promote open-flame resistant performance for mattresses and upholstered furniture applications. Ventex has briefed the Commission's staff on several occasions regarding this issue and has openly shared our testing results that reflect the success and performance of state-of-the-art products in addressing the challenge of open-flame resistant performance.

Today, Ventex's fabrics are widely used to achieve full-scale, open-flame resistant performance in high-risk occupancies for healthcare, dormitory and contract mattresses, testing under standards such as California Technical Bulletins #129 and #133, ASTM E-1590, Boston Fire Department IX-11 and British Standard #5852 – Crib 5.

These rigorous requirements originate in elements of both the NFPA 101[®] The Life Safety Code[®] and locally based occupancy and fire prevention ordinances and regulations. The Department of Health and Human Services (HHS) presently has adopted the Life Safety Code for Medicare covered facilities and the Joint Commission for Accreditation of Health Care Organizations (JCAHO) mandates compliance with Life Safety Code as part of its Environment of Care evaluation process. Finally, nearly forty states have adopted the Life Safety Code 101® as the foundation for their state fire laws. By extension, the provisions for mattress flammability in high risk occupancies are presently codified into law in those jurisdictions.

Page 2 Mattress NPR – CPSC Office of Secretary March 28, 2005

Our testing history clearly demonstrates that these test methods are more rigorous than the NIST / TB603 test method that is proposed.

As the move toward adoption of the TB603-style test method evolved, we conducted numerous tests under the NIST/TB603 protocol on mattresses that had all previously been tested to compliance (or passing results) with TB #129, UL 1895, ASTM E1590 and/or BFD IX-11. To say these products passed TB603 with "flying colors" would be an understatement. However, as we worked with designs engineered merely to comply with the TB603 requirements, the ability to pass tests such as TB #129, UL 1895, ASTM E1590 and/or BFD IX-11 was very poor.

To summarize our findings — mattresses that already meet "harder" tests such as TB #129, UL 1895, ASTM E1590 and/or BFD IX-11 and are in use in high-risk occupancies have universally passed NIST / TB 603 testing with ease. Mattresses that were designed to only comply with NIST / TB603 test method did not pass the more rigorous tests designed for high-risk occupancies on a universal basis.

As we have watched the dialog unfold surrounding this issue, previously in California and now at the Federal level, we have taken careful note of the misstatements and misrepresentations have been made in the marketplace regarding the enacted and proposed standards. We have heard more than once, mattress manufacturers who assert that TB603 is the "hardest test" or that if a mattress meets TB603 it can "meet everything." This is just not true based on the test outcomes we have seen.

In the early stages of this process, the mattress industry sought to avoid use of California TB #129 (or its equivalents – ASTM E1590 or UL 1895) as a performance criteria for mattresses because it cited these test protocols as being tests for "high risk" occupancies and thus were not appropriate for a residential settings. The resulting test method that was settled on is the NIST / TB603 test method identified in the NPR as the proposed basis of the Federal regulation. Given this evolution, it would be contradictory and absurd now or in the future for the mattress industry to propose or even insinuate that the easier NIST / TB603 test method is appropriate for use in high-risk occupancies presently covered by the "harder" tests.

In light of these factors, we request that the CPSC address the following issues as it formulates its Final Rule:

- Clearly state that the proposed NIST / TB603 test method is materially different from existing standards for high risk occupancies such as TB #129, UL 1895, ASTM E1590 and/or BFD IX-11.
- Clearly state that the CPSC has no scientific evidence that supports any finding that the proposed NIST / TB603 test method is "harder" than existing standards

Page 3
Mattress NPR – CPSC Office of Secretary
March 28, 2005

for high-risk occupancies such as TB #129, UL 1895, ASTM E1590 and/or BFD IX-11.

- Clearly state that the proposed standard is offered as a "new minimum standard" for mattress flammability and not intended to supplant existing standards that may place more rigorous demands on mattress flammability performance. California officials have stated in public hearings that TB603 is a "new minimum standard" in their state.
- Clearly support and encourage the continued use in high-risk occupancies of existing standards such as TB #129, UL 1895, ASTM E1590 and/or BFD IX-11.

Furthermore, CPSC should be absolutely clear in its Final Rule, that the proposed regulatory standard does not replace the existing laws on the books of nearly 40 states regarding mattress flammability provisions of the Life Safety Code that cover high risk occupancies and that it concurs with California's finding that this is indeed "a new minimum standard". Guidance should in fact be offered to mattress manufacturers serving the needs of high risk occupancies that there are a number of tests available to gauge mattress performance under scenarios of open flame ignition and that prudence would dictate employing more than the minimum for controlling risk in such environments.

I appreciate in advance the consideration that the Commission will give to my comments and am available at your convenience to provide any further clarification of the issues that I have raised.

Sincerely, **VENTEX**, **INC**.

Harrison Murphy President

GBH International

2 Friar's Lane Mill Valley, CA, 94941

Tel: 415-388-8278; FAX: 415-388-5546

e-mail: GBHINT@aol.com

Office of the Secretary, Consumer Product Safety Commission, Washington, DC 20207–0001

March 28, 2005

Dear Sir/Madam,

I would like to comment on the proposed regulatory activities by the Commission associated with the fire safety of mattresses. As a fire safety professional, I am very pleased that the Consumer Product Safety Commission is taking the leadership in attempting to provide fire-safe mattresses for all Americans. I strongly believe that this has the potential for considerably lowering the number of fire victims associated with mattress burning, especially children. I have also been able to comment on the activities of the California Bureau of Home Furnishings and Thermal Insulation, and the attached three documents represent public input I have given the Bureau.

There is no doubt in my mind that having a fire safety requirement for open flame ignition of residential mattresses is a critical and worthwhile activity, which will improve fire safety. I am somewhat concerned, however, that the requirements could be made much safer with some small changes, consistent with the original petition by Whitney Davis and with the spirit of California Assembly Bill 603 (the Dutra bill). I want to make several points (similar to those made earlier):

- * The NIST tests have shown that it is possible to meet the maximum 200 kW in the fire test by using standard (non fire retarded) foam with a barrier. In fact, that was one of the results of the original NIST work: the "fire-safe design" mattress in NIST Technical Note 1446, "Estimating Reduced Fire Risk Resulting from an Improved Mattress Flammability Standard", by T.J. Ohlemiller and R.G, Gann, 2002, was identical to the standard (unsafe) residential mattress, except that the only fire protection was the use of an external barrier (while retaining all non fire retarded foam inside). Using barriers without protecting the foam underneath is extremely dangerous since it is well known that the bulk of the fuel (and thus, the bulk of the resulting heat release) comes from the padding (foam) in a mattress. Thus, the use of a mattress with unsafe padding or foam has the potential to create a severe fire if the barrier is breached.
- * It is well known that children often play with implements that can result in broken barriers/tickings. Moreover, a very significant fraction of the fires staring in residential mattresses are started by children playing. Such children may well damage the mattress ticking "as a game", thus exposing the unsafe padding or foam.

- * It is thus imperative to require some level of improved fire performance of the foam (or padding) itself. My recommendation would be that the padding should the level of fire safety represented by the padding requirements in the draft February 2002 proposed edition of California Technical Bulletin 117. This will significantly lower the heat release rate of the padding. Paddings that meet the current version of California Technical Bulletin 117, dated March 2000, do not offer any significant improvement in fire safety or heat release.
- * Recent public presentations by CPSC staff and associated conversations suggest that the Commission is heading in the same direction as the California Bureau with regard to its intended regulation of open flame ignition of upholstered furniture. If that is the case, it would be perfectly satisfactory, from the fire safety point of view, to use a CPSC test as a way to ensure improved fire safety of the padding rather than use a California proposed test.
- I am a great supporter of consensus codes and standards. I am a member of the NFPA Technical Committee on Fire Tests and the recording secretary of both the ASTM committee on fire standards (ASTM E05) and the ASTM subcommittee on fire standards for furnishings and contents (and its former chairman) (ASTM E05.15). I am also the chairman of the NFPA Technical Committee on Hazard and Risk of Contents and Furnishings and a member of the NFPA Technical Committee dealing with fire safety of contents and furnishings for the NFPA 101 Life Safety Code and the NFPA 5000 Building Code. CPSC has long been working with ASTM E05.15, which is the logical committee that could develop a fire test standard for upholstered furniture and/or mattress components. In view of that, I introduced a draft standard test method based on the California draft February 2002 proposed edition of California TB 117 in June 2004 into ASTM E05.15. The subcommittee members voted not to discuss the document but to wait until the next meeting. At the next meeting, December 2004, a motion was made and passed, stating as follows: "That subcommittee E05.15 cease and desist from any further work on the proposal presented by Dr Marcelo M. Hirschler regarding the revised California Technical Bulletin 117 draft Feb 2002 proposed test method." Clearly, the avenue for a voluntary consensus standard test method is closed at ASTM, which makes it important that such activity take place at CPSC.
- * As I have already stated publicly, work at CBHF has demonstrated that the NIST burner (used in CA TB 603) is significantly less severe than the burner in the ASTM E 1590/CA TB 129 test. Thus, I believe that using the CA TB 603 fire test instead of the ASTM E 1590 fire test for rulemaking is not fully representative of what was intended in AB 603 and will be much less effective increasing fire safety in California than was intended by the Legislature when it passed AB 603. Please consider using ASTM E 1590, with a pass/fail criterion of 100 kW, as originally envisaged in AB 603 instead of the now proposed fire test for rulemaking.
- * It has been technically feasible for many years to develop mattresses that meet the requirements of CA TB 129, with a pass fail criterion of a peak rate of heat release of 100 kW. Thus, this pass fail criterion of 100 kW should remain the requirement for rulemaking of mattresses. Analyses that I have conducted, following fire tests, have shown that mattresses that meet the requirements of the test in ASTM E 1590, but with a pass-fail criterion of 250 kW can easily cause a small compartment (even one with a minimal amount of combustibles) to reach flashover very quickly when ignited with a realistic ignition source. This work was published as: "Fire Safety in Detention Environments", Marcelo M.

Hirschler, Fire Risk & Hazard Assessment Symposium, Fire Protection Research Foundation, June 20-22, 2001, Baltimore, MD, pp., NFPA, Quincy, MA. Tests that I have conducted indicate that heat release rates of significantly less than 200 kW were obtained with mattresses available in the USA in the 1930s. We should be able to provide technology in the 21st century that exceeds the level of fire safety from the 1930s!!!! This work was published as: "Mattress/Bedding Fires: Statistics and Fire Data Associated with Recent Experience", M.M. Hirschler, Fire and Materials Conf., San Francisco, CA, Jan. 22-24, 2001, Interscience Communications, London, UK, pp. 129-140. Research that I have conducted has shown that mattresses sold in the United Kingdom have been able to be built with padding materials of vastly superior fire performance than the padding materials in general use in the USA. This work was published in: "Flammability of Mattresses: Recent Fire Test Data and Implications", M.M. Hirschler, Business Communications Company Eleventh Ann. Conference on Recent Advances in Flame Retardancy of Polymeric Materials, June 3-5, 2002, Stamford, CT, Ed. M. Lewin, pp. 280, Norwalk, CT, 2002.

- * The work conducted by NIST, in NIST Technical Note 1446, "Estimating Reduced Fire Risk Resulting from an Improved Mattress Flammability Standard", by T.J. Ohlemiller and R.G, Gann, 2002, showed that a mattress where the only fire protection is the use of an external barrier (while retaining all non fire retarded foam inside) can lead to a peak rate of heat release of 750 kW (Table 4, page 45, Note 37), even though the mild NIST burner was used. This mattress was the one NIST considered to be a "fire safe design", which was actually unsafe when fully tested. Thus, it is critical to ensure that such mattresses are safe in realistic fires and that the use of mediocre barriers is not the only fire protection afforded the consumer. Therefore, the use of a very long test period is critical to ensure that unsafe mattresses are not used: the peak rate of heat release was achieved after more than 30 min of testing (this does not address the ignition source). Thus, the mattress fire test should indeed be followed for 60 min, for safety's sake.
- In order to ensure that a mattress is really safe in the event of fire, rather than just providing some delay in ignition, a sufficiently long application of an ignition source is critical. Work by the Combustion Behaviour of Upholstered Furniture (CBUF) project indicated that "It is important that the ignition conditions (size of ignition source and time and point of attack) during standardised testing, will not influence the results of the hazard analysis." (B. Sundstrom, "CBUF - Fire Safety of Upholstered Furniture - the final report on the CBUF research programme" - European Commission - Measurements and Testing Report EUR 16477 EN, Interscience Communications, London, UK, 1996, p. 65). From that, CBUF authors conclude that the critical fire safety considerations are based on the heat released once a "detectable fire size" of 50 kW is reached and they call the period from application of the ignition source until a detectable fire size is observed as the "ignition period". They further show that testing with an ignition source that is too small can lead to a false sense of safety, while testing with more severe ignition sources leads to very similar heat release rate curves. Therefore, the time of application of the NIST burner should be increased to obtain a realistic representation of the fire hazard of mattresses. Ignition source application times of 50 seconds and 70 seconds, as used in CA TB 603 and in the proposed CPSC test, are insufficiently long to give a needed margin of safety. It is important to note that the socalled "safe" mattresses tested by NIST using CA TB 603 (in NISTIR 6497, mattresses 3 and 4) did not reach the "detectable fire size", indicating that they were not really fully ignited. On the other hand, that same mattress 3 gave up to 750 kW when the cover fabric/barrier was

breached (NIST TN 1446). Therefore, clearly the duration of application of the ignition source was insufficient. I strongly recommend that, if the proposed fire test is used, the time application of the ignition source be increased (for example to 180 seconds, as in ASTM E 1590 and CA TB 129).

- * The proposed test method provides only 2 test configurations: a furniture calorimeter and a "California" room, such as the one in existence at the California Bureau of Home Furnishings and Thermal Insulation. Other full scale fire tests, including ASTM E 1590, ASTM E 1537 and ASTM E 1822, as well as the traditional California technical bulletins (CA TB 129 and CA TB 133) all permit the use of three test configurations: the two mentioned above and the "ASTM" or "ISO" room. The size of that room is 8 ft x 12 ft x 8 ft high, or 2.4 m x 3.7 m x 2.4 m high, with a door in the center of one of the narrower walls.
- * There are at present several fire test labs capable of conducting such tests and many of them use the more popular "ASTM" room (or "ISO" room, with). Permission for use of the "ASTM" room would provide much better flexibility in testing in two ways: (a) more labs could conduct the test and (b) the test specimen could be located more conveniently in the middle of the wall opposite to the door and the ignition burner handle would then not have to be cramped but would protrude out the door. This would increase the facility of testing. The interactions caused by the radiation from the walls are negligible for heat release rates of less than 200 kW.
- * It is also important for CPSC to consider a problem that has become evident regarding the regulation in California. The state of California is unable to place mattresses of sizes other than a "twin" (or single mattress) in its fire test facility (with a "California" room). Therefore, all testing in California must be conducted on "twin" mattresses. This leaves a potentially large loophole in case a manufacturer were to choose not to develop larger mattresses that are as safe as the "twin" mattresses, since the state would be unable to verify the safety of that mattress. Thus, testing of mattresses should be able to be conducted on any size mattress and should not be restricted to "twin" sizes. This could also be solved simply by changing the test environment as discussed above.
- * At the same time, CPSC might also want to consider preserving the possibility of applying the ignition burner at varied locations along the top and side of the mattress, to ensure the uniformity of the fire safety measures used.
- Melting and dripping with the formation of flaming drips is a severe fire hazard and should constitute a criterion for failing a system. When flaming drips occur they can cause the ignition of materials or products on the floor and spread the fire easily. Moreover, materials that melt and drip away from the flame (unless the flame is applied directly from above) "cheat" the test by appearing to meet the requirements but, in effect, not really "burning" under the test conditions, while they would burn under realistic fire conditions.
- * In conclusion, I recommend the following:
 - (i) Incorporate a requirement for the mattress padding/foam to meet a certain level of fire performance, for example at least the draft February 2002 version of CA TB 117, to limit the heat release possible in the bedroom.

- (ii) Replace the proposed fire test with ASTM E 1590/CA TB 129, using the pass-fail criteria for CA TB 129 (mainly 100 kW).
- (iii) Use as the pass/fail criterion for peak heat release rate a heat release rate of 100 kW, irrespective of the fire test used.
- (iv) Use an end point criterion that ensures that testing is not abandoned until one of the following criteria apply: (1) there are no visible signs of any type of burning, (2) flashover appears inevitable or (3) one hour has elapsed. As a minimum, ensure that test observation continues for a period of 1 hour.
- (v) If the proposed fire test is to be used, which is not recommended, increase the time of application of the ignition source to 120 seconds or more.
- (vi) Permit the use of the ASTM room as an alternative to the California room.
- (vii) Not restrict testing to "twin" mattresses.
- (viii) Include an option to test at any location on the side of the mattress to ensure uniformity of application of fire safety designs in the mattress.

Yours sincerely

Dr. Marcelo M. Hirschler

March W. Huschler

GBH International

2 Friar's Lane Mill Valley, CA, 94941

Tel: 415-388-8278; FAX: 415-388-5546

e-mail: GBHINT@aol.com

Ms Susan Lancara Bureau of Home Furnishings & Thermal Insulation State of California - Dept. Consumer Affairs 3485 Orange Grove Avenue North Highlands, CA, 95660-5595

April 17, 2003

Dear Ms Lancara,

I would like to comment on the proposed regulatory activities by the Bureau associated with the fire safety of mattresses, and related to AB 603.

I am very pleased that the Bureau of Home Furnishings & Thermal Insulation is taking the leadership in attempting to provide fire-safe mattresses for the residents of the State of California, in accordance with Assembly Bill 603. I believe that AB 603 has the potential for considerably lowering the number of fire victims associated with mattress burning, especially children.

However, I am very concerned about the potential for unsafe mattresses unless the requirements are based on a fire test method of suitable severity. Thus, I want to make several points.

- * Work at CBHF has demonstrated that the NIST burner (used in TB 603) is significantly less severe than the burner in the CA TB 129 test. Thus, I believe that using TB 603 instead of TB 129 for rulemaking is not fully representative of what was intended in AB 603 and will be much less effective increasing fire safety in California than was intended by the Legislature when it passed AB 603. Please consider reinstating TB 129 (or its equivalent ASTM E 1590, with a pass/fail criterion of 100 kW), as originally envisaged in AB 603 instead of the now proposed TB 603 for rulemaking.
- * It has been possible for many years to develop mattresses that meet the requirements of CA TB 129, with a pass fail criterion of a peak rate of heat release of 100 kW. Thus, this pass fail criterion of CA TB 129 (namely 100 kW) should remain the requirement for rulemaking of mattresses.

- * Analyses that I have conducted, following fire tests, have shown that mattresses that meet the requirements of the test in ASTM E 1590 (or in NFPA 267 or in CA TB 129), but with a pass-fail criterion of 250 kW can easily cause a small compartment (even one with a minimal amount of combustibles) to reach flashover very quickly when ignited with a realistic ignition source. This work was published as: "Fire Safety in Detention Environments", Marcelo M. Hirschler , Fire Risk & Hazard Assessment Symposium, Fire Protection Research Foundation, June 20-22, 2001, Baltimore, MD, pp. , NFPA, Quincy, MA.
- * Tests that I have conducted indicate that heat release rates of significantly less than 150 kW were obtained with mattresses available in the USA in the 1930s. We should be able to provide technology in the 21st century that exceeds the level of fire safety from the 1930s!!!! This work was published as: "Mattress/Bedding Fires: Statistics and Fire Data Associated with Recent Experience", M.M. Hirschler, Fire and Materials Conf., San Francisco, CA, Jan. 22-24, 2001, Interscience Communications, London, UK, pp. 129-140.
- * Melting and dripping with the formation of flaming drips is a severe fire hazard and should constitute a criterion for failing a system. When flaming drips occur they can cause the ignition of materials or products on the floor and spread the fire easily. Moreover, materials that melt and drip away from the flame (unless the flame is applied directly from above) "cheat" the test by appearing to meet the requirements but, in effect, not really "burning" under the test conditions, while they would burn under realistic fire conditions.
- * It is important to realize that a room will reach full fire involvement as a result of the heat released by a mattress which then ignites other nearby products, since a mattress is usually the item with the largest heat content in a bedroom. Thus, the control of the heat released by the mattress is critical and a value of 150 kW is excessive.
- * The bed clothing that is most likely to release high levels of heat, such as padded comforters, are not used in a large fraction of the homes in California. They are not used to any significant extent in Southern California because the climate is such that additional protection against the cold weather is not usually necessary. They are also not used in low income housing since the cost significantly exceeds the cost of blankets
- * Research that I have conducted has shown that mattresses sold in the United Kingdom have been able to be built with padding materials of vastly superior fire performance than the padding materials in general use in the USA. This work was published in: "Flammability of Mattresses: Recent Fire Test Data and Implications", M.M. Hirschler, Business Communications Company Eleventh Ann. Conference on Recent Advances in Flame Retardancy of Polymeric Materials, June 3-5, 2002, Stamford, CT, Ed. M. Lewin, pp. 280, Norwalk, CT, 2002.

- The work conducted by NIST, in NIST Technical Note 1446, "Estimating Reduced Fire Risk Resulting from an Improved Mattress Flammability Standard", by T.J. Ohlemiller and R.G, Gann, 2002, showed that a mattress where the only fire protection is the use of an external barrier (while retaining all non fire retarded foam inside) can lead to a peak rate of heat release of 750 kW (Table 4, page 45, Note 37), even though the mild NIST burner was used. This mattress was the one NIST considered to be a "fire safe design", which was actually unsafe when fully tested. Thus, it is critical to ensure that such mattresses are safe in realistic fires and that the use of mediocre barriers is not the only fire protection afforded the consumer. The use of a very long test period is critical to ensure that unsafe mattresses are not used: the peak rate of heat release was achieved after more than 30 min of testing (this does not address the ignition source). Thus, the test should indeed be followed for 60 min, for safety's sake.
- In order to ensure that a mattress is really safe in the event of fire, rather than just providing some delay in ignition, a sufficiently long application of an ignition source is Work by the Combustion Behaviour of Upholstered Furniture (CBUF) project critical. indicated that "It is important that the ignition conditions (size of ignition source and time and point of attack) during standardised testing, will not influence the results of the hazard analysis." (B. Sundstrom, "CBUF - Fire Safety of Upholstered Furniture - the final report on the CBUF research programme" - European Commission - Measurements and Testing Report EUR 16477 EN, Interscience Communications, London, UK, 1996, p. 65). From that, CBUF authors conclude that the critical fire safety considerations are based on the heat released once a "detectable fire size" of 50 kW is reached and they call the period from application of the ignition source until a detectable fire size is observed as the They further show that testing with an ignition source that is too small can lead to a false sense of safety, while testing with more severe ignition sources leads to very similar heat release rate curves. Therefore, the time of application of the NIST burner should be increased to obtain a realistic representation of the fire hazard of mattresses. Ignition source application times of 50 seconds and 70 seconds, as shown in TB603, are insufficiently long to give a needed margin of safety. It is important to note that the so-called "safe" mattresses tested by NIST using TB 603 (in NISTIR 6497, mattresses 3 and 4) did not reach the "detectable fire size", indicating that they were not really fully ignited. On the other hand, that same mattress 3 gave up to 750 kW when the cover fabric/barrier was breached (NIST TN 1446). Therefore, clearly the duration of application of the ignition source was insufficient. I strongly recommend that, if TB 603 is used, the time application of the ignition source be increased (for example to 180 seconds, as in TB 129).
- * In conclusion, I recommend the following:
 - (i) Continue with this rulemaking to increase consumer safety.
 - (ii) Replace TB 603 with TB 129, which is a fire test that is much more representative of real residential fire safety conditions.

- (iii) Use as peak rate of heat release pass/fail criterion a rate of heat release of 100 kW
- (iv) Add a pass/fail criterion that ensures that there are no flaming drips from the test sample.
- (v) Continue using an end point criterion that ensures that testing is not abandoned until one of the following criteria apply: (1) there are no visible signs of any type of burning, (2) flashover appears inevitable or (3) one hour has elapsed.
- (vi) If TB 603 is to be used, which is not recommended, increase the time of application of the ignition source to 120 seconds.
- * It is critical that the test method that is used results in real fire safety for the consumer.

Yours sincerely

Dr. Marcelo M. Hirschler

GBH International

2 Friar's Lane Mill Valley, CA, 94941

Tel: 415-388-8278; FAX: 415-388-5546

e-mail: GBHINT@aol.com

Ms Susan Lancara Bureau of Home Furnishings & Thermal Insulation State of California - Dept. Consumer Affairs 3485 Orange Grove Avenue North Highlands, CA, 95660-5595

July 30, 2003

Dear Ms Lancara,

I would like to comment once more on the proposed regulatory activities by the Bureau associated with the fire safety of mattresses, and related to AB 603.

As I have already said before, I am very pleased that the Bureau of Home Furnishings & Thermal Insulation is taking the leadership in attempting to provide fire-safe mattresses for the residents of the State of California, in accordance with Assembly Bill 603. I still strongly believe that AB 603 has the potential for considerably lowering the number of fire victims associated with mattress burning, especially children.

However, it has now become clear that the proposed California Technical Bulletin 603 has a very strong potential to allow unsafe mattresses to be used and thwart the intentions of AB 603. This is especially true in view of the fact that it is proposed not to require that the padding itself meet California Technical Bulletin 117. Thus, I want to make several points.

* It has been shown that CA TB 603 can be met by using standard (non fire retarded) foam with a barrier. In fact, that was one of the results of the original NIST work: the "fire-safe design" mattress in NIST Technical Note 1446, "Estimating Reduced Fire Risk Resulting from an Improved Mattress Flammability Standard", by T.J. Ohlemiller and R.G, Gann, 2002, was identical to the standard (unsafe) residential mattress, except that the only fire protection was the use of an external barrier (while retaining all non fire retarded foam inside). This is extremely dangerous since it is well known that the bulk of the fuel (and thus, the bulk of the resulting heat release) comes from the padding (foam) in a mattress. Thus, the use of a mattress with unsafe padding or foam has the potential to create a severe fire if the barrier is breached.

- * It is well known that a very significant fraction of the fires staring in residential mattresses are started by children playing. Such children may well damage the mattress ticking "as a game", thus exposing the unsafe padding or foam.
- * It is thus imperative to require that the foam itself meet a certain level of fire safety, at least as represented by California Technical Bulletin 117, which will somewhat lower its heat release rate (especially once the improved version of TB 117 is approved).
- * The use of the draft TB 603 with no requirements for fire performance of padding will have the potential of actually *decreasing* the fire safety of a mattress compared to mattresses that contain fire retarded padding. This is certainly not what was the intention behind the legislation contained in AB 603.
- * As I have already stated several times, work at CBHF has demonstrated that the NIST burner (used in TB 603) is significantly less severe than the burner in the CA TB 129 test. Thus, I believe that using TB 603 instead of TB 129 for rulemaking is not fully representative of what was intended in AB 603 and will be much less effective increasing fire safety in California than was intended by the Legislature when it passed AB 603. Please consider reinstating TB 129 (or its equivalent ASTM E 1590, with a pass/fail criterion of 100 kW), as originally envisaged in AB 603 instead of the now proposed TB 603 for rulemaking.
- * The proposed changes issued July 15, 2003 make the TB 603 test even weaker, by permitting a higher heat release rate and observing the mattress for a shorter period. Both modifications (going from 1 hour test duration to 30 minutes test duration and going from a 150 kW pass/fail criterion to a 200 kW pass/fail criterion) will result in a milder test and a lower degree of safety. I have several times argued that a pass/fail criterion of 100 kW should be required, and I still believe so.
- * It has been possible for many years to develop mattresses that meet the requirements of CA TB 129, with a pass fail criterion of a peak rate of heat release of 100 kW. Thus, this pass fail criterion of CA TB 129 (namely 100 kW) should remain the requirement for rulemaking of mattresses.
- * Analyses that I have conducted, following fire tests, have shown that mattresses that meet the requirements of the test in ASTM E 1590 (or in NFPA 267 or in CA TB 129), but with a pass-fail criterion of 250 kW can easily cause a small compartment (even one with a minimal amount of combustibles) to reach flashover very quickly when ignited with a realistic ignition source. This work was published as: "Fire Safety in Detention Environments", Marcelo M. Hirschler, Fire Risk & Hazard Assessment Symposium, Fire Protection Research Foundation, June 20-22, 2001, Baltimore, MD, pp., NFPA, Quincy, MA.
- * Tests that I have conducted indicate that heat release rates of significantly less than 150 kW were obtained with mattresses available in the USA in the 1930s. We should be able to provide technology in the 21st century that exceeds the level of fire safety from the 1930s!!!! This work was published as: "Mattress/Bedding Fires: Statistics and Fire Data Associated with Recent Experience", M.M. Hirschler, Fire and Materials Conf., San Francisco, CA, Jan. 22-24, 2001, Interscience Communications, London, UK, pp. 129-140.

- * Melting and dripping with the formation of flaming drips is a severe fire hazard and should constitute a criterion for failing a system. When flaming drips occur they can cause the ignition of materials or products on the floor and spread the fire easily. Moreover, materials that melt and drip away from the flame (unless the flame is applied directly from above) "cheat" the test by appearing to meet the requirements but, in effect, not really "burning" under the test conditions, while they would burn under realistic fire conditions.
- * It is important to realize that a room will reach full fire involvement as a result of the heat released by a mattress which then ignites other nearby products, since a mattress is usually the item with the largest heat content in a bedroom. Thus, the control of the heat released by the mattress is critical and a value of 150 kW is excessive, and one of 200 kW is even less safe.
- * Research that I have conducted has shown that mattresses sold in the United Kingdom have been able to be built with padding materials of vastly superior fire performance than the padding materials in general use in the USA. This work was published in: "Flammability of Mattresses: Recent Fire Test Data and Implications", M.M. Hirschler, Business Communications Company Eleventh Ann. Conference on Recent Advances in Flame Retardancy of Polymeric Materials, June 3-5, 2002, Stamford, CT, Ed. M. Lewin, pp. 280, Norwalk, CT, 2002.
- * The work conducted by NIST, in NIST Technical Note 1446, "Estimating Reduced Fire Risk Resulting from an Improved Mattress Flammability Standard", by T.J. Ohlemiller and R.G, Gann, 2002, showed that a mattress where the only fire protection is the use of an external barrier (while retaining all non fire retarded foam inside) can lead to a peak rate of heat release of 750 kW (Table 4, page 45, Note 37), even though the mild NIST burner was used. This mattress was the one NIST considered to be a "fire safe design", which was actually unsafe when fully tested. Thus, it is critical to ensure that such mattresses are safe in realistic fires and that the use of mediocre barriers is not the only fire protection afforded the consumer. The use of a very long test period is critical to ensure that unsafe mattresses are not used: the peak rate of heat release was achieved after more than 30 min of testing (this does not address the ignition source). Thus, the test should indeed be followed for 60 min, for safety's sake.
- In order to ensure that a mattress is really safe in the event of fire, rather than just providing some delay in ignition, a sufficiently long application of an ignition source is critical. Work by the Combustion Behaviour of Upholstered Furniture (CBUF) project indicated that "It is important that the ignition conditions (size of ignition source and time and point of attack) during standardised testing, will not influence the results of the hazard analysis." (B. Sundstrom, "CBUF Fire Safety of Upholstered Furniture the final report on the CBUF research programme" European Commission Measurements and Testing Report EUR 16477 EN, Interscience Communications, London, UK, 1996, p. 65). From that, CBUF authors conclude that the critical fire safety considerations are based on the heat released once a "detectable fire size" of 50 kW is reached and they call the period from application of the ignition source until a detectable fire size is observed as the "ignition period". They further show that testing with an ignition source that is too small can lead to a false sense of safety, while testing with more severe ignition sources leads to very similar heat release rate curves. Therefore, the time of application of the NIST burner should be increased to obtain a realistic representation of the fire hazard of mattresses. Ignition source application times of 50 seconds and 70 seconds, as shown in TB603, are insufficiently long to give a needed margin of safety. It is

important to note that the so-called "safe" mattresses tested by NIST using TB 603 (in NISTIR 6497, mattresses 3 and 4) did not reach the "detectable fire size", indicating that they were not really fully ignited. On the other hand, that same mattress 3 gave up to 750 kW when the cover fabric/barrier was breached (NIST TN 1446). Therefore, clearly the duration of application of the ignition source was insufficient. I strongly recommend that, if TB 603 is used, the time application of the ignition source be increased (for example to 180 seconds, as in TB 129).

- * In conclusion, I recommend the following:
 - (i) Retain a requirement for mattress padding/foam to meet a certain level of fire performance, for example at least CA TB 117. If this section is eliminate, it will be certain that much of the padding will have extremely poor fire performance, dramatically increasing the probability of having an unsafe mattress.
 - (ii) **Replace CA TB 603 with CA TB 129**, which is a fire test that is much more representative of real residential fire safety conditions.
 - (iii) Use as the pass/fail criterion for peak rate of heat release a rate of heat release of 100 kW, whether TB 129 or TB 603 is used.
 - (iv) Add a pass/fail criterion to the regulation to ensure that there are no flaming drips from the test sample.
 - (v) Use an end point criterion that ensures that testing is not abandoned until one of the following criteria apply: (1) there are no visible signs of any type of burning, (2) flashover appears inevitable or (3) one hour has elapsed. As a minimum, retain the minimum testing duration of 1 hour in TB 603.
 - (vi) If TB 603 is to be used, which is not recommended, increase the time of application of the ignition source to 120 seconds.
 - In other words, the modifications proposed in the July 15, 2003communication are all inappropriate and will lead to significantly lowered fire safety. The most serious problem is the raising of the pass/fail criterion from 150 kW (already too high) to 200 kW.
 - * It is critical that the test method that is used results in real fire safety for the consumer. The document issued on July 15, 2003 will not ensure the use of fire-safe mattresses by the children and other residents of California.

Yours sincerely

GBH International

2 Friar's Lane Mill Valley, CA, 94941

Tel: 415-388-8278; FAX: 415-388-5546 e-mail: GBHINT@aol.com

Ms Susan Lancara Bureau of Home Furnishings & Thermal Insulation State of California - Dept. Consumer Affairs 3485 Orange Grove Avenue North Highlands, CA, 95660-5595

November 5, 2003

Dear Ms Lancara,

I want to comment on the proposed modifications to the text of section 1371 of Title 4; Cal. Code of Regulations, as stated by the Bureau Chief, Ms Lynn Morris, dated November 3, 2003.

Fire safety is primarily associated with heat release, and the rate of heat release of a mattress is a function of the padding used, because of its much larger mass than that of the ticking and other covers.

The work conducted by NIST, in NIST Technical Note 1446, "Estimating Reduced Fire Risk Resulting from an Improved Mattress Flammability Standard", by T.J. Ohlemiller and R.G, Gann, 2002, showed that a mattress that is fire retarded simply with an external barrier (and without change to the foam used) can lead to a peak rate of heat release of 750 kW (Table 4, page 45, Note 37), even though the mild NIST burner was used. This mattress was the one NIST considered to be a "fire safe design", which was actually unsafe when fully tested. Thus, it is critical to ensure that such mattresses are safe in realistic fires and that the use of mediocre barriers is not the only fire protection afforded the consumer. This is especially true if the consumer believes that the new mattresses are fire safe.

In consequence, it is clear that CA Technical Bulletin 603 can be met without using fire safe padding materials. If the polyurethane foam used in new mattresses does not meet a minimum of fire safety, by complying with CA TB 117, it is critical that the consumer be aware of this. It is critical that the test method that is used results in real fire safety for the consumer.

Therefore, it is critical that the labeling that indicates that the foam is still unsafe if it does not meet California TB 117 must remain. Please do not delete section 1373.1 of Title 4 of the California Code of Regulations. It is now more critical than ever to retain this warning to prevent tragedies due to misinformation to the consumer.

Yours sincerely

Dr. Marcelo M. Hirschler

Madrias

TRACE INDUSTRIES, INC.

500 Second Avenue Houston, Mississippi 38851 Phone 662 456-4261 Fax 662 456-4274

Email traceind@bellsouth.net

517

March 24, 2005

Mr. Hal Stratton, Chairman Consumer Product Safety Commission 4330 East West Highway Bethesda, MD 20814

Dear Chairman Stratton:

Thank you for this opportunity for my company, Trace Industries, Inc., to express our comments on the proposed mattress flammability standard 16 CFR 1633. Through the over 30 years we have been in business, we have witnessed the improvements in fire safety made through the diligent efforts of this Commission. We support the Commission in taking its commitment to fire safety to the next level with this proposed standard.

I won't belabor the obvious. Though the testimony and supporting data of many well qualified sources, including the International Sleep Products Association and the National Cotton Batting Institute, of which we are members, along with the thorough efforts of the Commission itself, the good sound science is there that safe and economical solutions are already in the marketplace to make this standard workable. All methods of implementation are already in place through our current experience in California. The safety and effectiveness of products have been proven even beyond their expected life cycle.

We request that the Commission move forward with this standard as quickly as possible. Our company and our industry stand ready to assist in any way we can for rapid implementation, for in reality, delays equal deaths.

Sincerely,

TRACE DIDUSTRIES, INC.

John Rowland

Secreatry/Treasurer

Mundhan

DuPont Advanced Fibers Systems Spruance Fibers P.O. Box 27001 Richmond, VA 23261



DuPont Advanced Fibers Systems

March 24, 2005

Office of the Secretary
Consumer Product Safety Commission
Room 502
4330 East-West Highway
Bethesda, Maryland 20814
Mr. Hal Stratton
Chairman
Washington, DC 22333

Re: Mattress NPR

Dear Mr. Stratton:

DuPont would like to submit the following comments in regard to the proposed rule making referenced by 70 FR 2470.

Summary:

- DuPont fully supports the CPSC proposed rule making 16 CFR 1633 as issued for public comment.
- We believe meaningful enforcement is necessary to help ensure compliance, and
 we appreciate the Commission's efforts to incorporate enforcement as part of the
 standard in order for the CPSC to achieve its ultimate goal of protecting people.
- We believe it is the responsibility of CPSC, as a leader in consumer safety, to
 ensure adherence to a rigorous Quality Assurance process at every level of the
 value chain in order to deliver sustainable performance against the proposed
 standard.
- Refurbished and/or renovated mattresses should be part of this standard.
- Enforcement will be necessary to insure compliance.
- We believe the CPSC, the leader in consumer safety, should take a strong position to require that FR solutions be effective and safe. To that end, we believe the CPSC should also evaluate topically treated FR solutions for safe use with the mattress manufacturers and consumers. Areas that we believe should be covered in this evaluation include its potential effectiveness as a barrier to deliver time to escape, respirable fibers and the possibility of dermal irritation within mattress manufacturer's facilities as well as with consumers.

Mr. Hal Stratton March 24, 2005 Page 2

- DuPont supports acceleration of a nationwide market implementation after the standard is finalized. Experience in California shows the industry that suppliers are ready to support adoption, and mattress manufacturers have been able to adopt appropriate technologies within the compliance time period. In our opinion, an accelerated adoption will serve to deliver improved safety to consumers, not only in California but in the rest of the nation.
- We believe the consumer is still generally uninformed about this public matter, and we request that CPSC take aggressive action to educate consumers about the importance of home fire safety; perhaps even asking the supply chain to help in the education process.
- DuPont has independently, and in cooperation with partner bedding manufacturers, completed full scale testing of its barrier products in many types of mattresses ranging from promotional to luxury. This has involved building and burning over 500 mattresses. DuPont has also conducted liquid abuse, mechanical abuse and respirable fiber testing on Dupont FR materials. This testing has demonstrated that DuPont barrier products can be used by mattress producers to design and produce mattresses that comply with the CPSC proposed rules under 16 CFR 1633 to a high degree of confidence and reliability.
- DuPont fire resistant barrier technology is commercially available, and FR thread
 is available for mattress producers to consider using in their mattress designs to
 comply with the proposed rule. DuPont FR barrier solutions are based on both
 fire resistant fiber properties and product design and are not affected by normal
 application use as represented by industry standard tests for durability and
 exposure to liquids.

Should you have any questions, please feel free to contact me directly at 804-383-3582.

Sincerely,

William J. Harvey

Vice President and General Manager DuPont Advanced Fiber Systems

WJH:afb

Northern Market



WE MAKE THE WORLD'S BEST MATTRESS™

March 24, 2005

Office of the Secretary Consumer Products Safety Commission 4330 East-West Highway, Room 502 Bethesda, MD 20814

Attn: Rockette Hammond

Re: Comments on NPR 16 CFR 1633 and ANPR 16 CFR 1634

OVERVIEW

Serta has reviewed the briefing documents on the NPR for 16 CFR 1633 and the ANPR for 16 CFR 1634. We find the protocol and criteria for passing 1633 are acceptable and that the regulation will provide a significant reduction in risk of a large fire in bedrooms furnished with compliant beds.

All Serta beds manufactured throughout the United States after January 2005 comply with the proposed 16 CFR 1633 even though this is not required by current law. Serta believes this is the responsible action to take on behalf of consumer safety. The company also finds it practical and economically feasible to produce and sell these safer consumer beds.

The assembly techniques and barrier systems used to protect the beds can be easily handled by current assembly methods and pose no added risk to the consumer, plant workers or the environment. Some retraining and improved maintenance is required to handle the increased wear that these materials place on current assembly and cutting machines.

As documented in your briefing package, the risk of a large fire is still very possible unless top-of-bed accessories are also regulated to resist ignition or burning from an open flame. To that end Serta supports a regulation for open flame resistance of top-of-bed accessories as proposed by the ANPR 16 CFR 1634.

DETAILED DISSCUSION

1633.2 (i) & (m) The definition of importer as a manufacturer should be broadened to include all foreign factories supplying the importer, just as it has been defined for domestic brand groups. This means each supplying factory must either prototype its designs or at least do a confirmation burn.

1633.7 (a) (5) (ii) & (iii) and drawings. The hole size should be changed to the # 53 drill size actually used on the production burners.

1633.7 (a) (5) (iv) Some labs do not wrap the copper tubing supplying the burner with insulation. In the course of testing compliant beds this seems to be an unnecessary requirement.

1633.11 (b) (2) Keeping physical samples of all materials used in each prototype is an unnecessary burden on the manufacturer and impractical. As worded a producer would have to keep wood frames, steel foundation parts, foundation upholstery, non skid panels, complete border assemblies, innerspring units, foam, fiber, insulators, backing, threads, ticking and labels.

1633.11 (b) (4) & 1633.4 (b) It is unclear what is meant by a "prototype that is not required to be tested before sale." If this term is meant to describe a unique design that falls under a tested prototype with a lesser fuel load, then we suggest using a different term instead of "prototype" to prevent confusion.

1633.14 (c) Define any commercial resellers of used mattresses that chemically or heat process the beds as manufacturers and require them to comply with the provisions of 16 CFR 1633.

Page 350 The placement of the screens should read "only if needed."

Alvin R. Klancnik

Group Vice President

Serta International



Mr. Beachata

wfitch@opl.com www.opl.com

March 28, 2005

Office of the Secretary Consumer Product Safety Commission 4330 East-West Highway Bethesda, MD 20814

Re: Mattress NPR

Dear Sir or Madam:

Omega Point Laboratories, Inc. (OPL) appreciates the opportunity to comment on the Standard for the Flammability (Open Flame) of Mattresses and Mattress/Foundation Sets and the Standard to Address Open Flame Ignition of Bedclothes; Proposed Rules. See 70 FR at 2470 (Jan 13, 2005).

OPL is the leading tester of mattresses for flammability characteristics in the world having conducted test on thousands of mattresses and mattress mock-ups or components for compliance with CPSC and California Bureau of Home Furnishings cigarette ignition resistance requirements, U.S. Navy open flame resistance tests, NFPA and ASTM test standards, and now CA BHF Standard TB 603. OPL is accredited by the American Association for Laboratory Accreditation (A2LA), and the International Accreditation Service (IAS) as qualified to conduct all of these tests as well as many others. OPL is an active member in the ASTM Committee E05 on Fire Tests, the NFPA Fire Test Technical Committee, the ISO TC 92 on Fire Test Standards, and the American Council of Independent Laboratories (ACIL).

OPL proposes that the Commission require that test results to demonstrate compliance with the proposed rule only be obtained by an accredited, independent laboratory. The requirement to perform testing at a competent laboratory that does not have a potential conflict of interest is necessary to give the general public confidence that products indeed provide the level of safety that is intended by the proposed rule. There are several organizations that already provide accreditation services to fire testing laboratories and that could expand the scope of their accreditation to include the proposed mattress flammability test standard.

Omega Point Laboratories, Inc.

16015 Shady Falls Road Elmendorf, Texas 78112-9784 210-635-8100 / FAX: 210-635-8101 / 800-966-5253 www.opl.com / e-mail: moreinfo@opl.com







Office of the Secretary Consumer Product Safety Commission March 28, 2005 Page 2

ACIL defines an independent testing firm as a commercial entity engaged in analysis, testing, inspection, materials engineering, sampling, product certifying, research or development, and related consulting services for the public. An independent laboratory is not affiliated with any institution, company or trade group that might affect its ability to conduct investigations, render reports, or give professional counsel objectively and without bias.

As noted in the attached proposed amendment to the Proposed Rulemaking (see §16633.2 Definitions (r) and (s) and §1633.4 Prototype testing requirements (d),) OPL strongly urges the CPSC to mandate the use of accredited laboratories to support the Commission's mission—to reduce deaths and injuries associated with mattress fires by limiting the size of the fire generated by a mattress or mattress and foundation set.

Commissioner Moore has noted that the tests required to properly implement this standard are complex and sophisticated and the competence of the laboratories performing these tests must be assured. During the staff presentation on December 9, 2004, both he and Chairman Stratton expressed concern regarding ensuring that laboratories were qualified to conduct this test. In his press release announcing his vote for the proposed rule Commissioner Moore stated the following:

"The test itself is quite precise and it will be imperative that labs performing this test for mattress manufacturers learn to do it properly. I will be very interested to read the report of the inter-lab study on the NIST test methodology which will make findings on the repeatability and the reproducibility of the test. The accreditation of labs that will do this test will be important to ensuring that the tests are done correctly. This is important, not only for the safety of consumers, but also to ensure a fair application of the standard across the mattress industry. The choice of test facility should give a manufacturer/importer neither an advantage nor a disadvantage in meeting this standard."

While the inter-lab study is not yet available to the public, accreditation is the nationally and internationally recognized system to provide that assurance. While most nations have a single accreditation and testing system, the U.S. free enterprise system provides multiple, competitive accreditors. As a means to assure the competency and impartiality of these accreditors the National Cooperation for Laboratory Accreditation (NACLA) has been established. This body accredits the Laboratory Accrediting Organizations, ensuring that they are in fact neutral and impartial as well as competent.

The independence of those conducting the tests is equally important. It is vital to consumer confidence that those assuring the conformance of the mattresses to the standard be free of any undue commercial, financial or other pressures that might influence their technical judgment.



Office of the Secretary Consumer Product Safety Commission March 28, 2005 Page 3

We applaud the Commission for its initiative to ensure public health and safety in this important area and strongly urge you to consider these important amendments to the proposed rule. We also applaud the manufacturers for their support in establishing a reasonable and responsible safety requirement for their products aimed at the protection of the public.

Sincerely,

William E. Fitch, P.E., No. 55296

Executive Vice President



J. Response to Comments On the ANPR

On October 11, 2001, the Commission published an ANPR in the Federal Register. 66 FR 51886. During the comment period, the Commission received sixteen written comments from businesses, associations and interested parties representing various segments of the mattress and bedding industries. After the close of the comment period, the Commission received a number of additional comments, including one from the California Bureau of Home Furnishings and Thermal Insulation urging the Commission to adopt California's TB 603 as a federal standard. Significant issues raised by all of these comments are discussed below. [14&15]

Comment. Two commenters recognize the sophistication and complexity of the test method used in California TB 603 and potentially in a federal standard. They suggest that CPSC explore laboratory accreditation programs to insure test labs are properly qualified to conduct this complex test.

Response. The interlaboratory study may identify laboratory practices, equipment, and other related factors that must be controlled to ensure consistent and accurate test results. The report and findings of the study will be available to the public; and appropriate guidance can be provided to interested laboratories. While accrediting test laboratories is not a CPSC function, the Commission supports industry and commercial laboratory development of such a program.

PART 1633—STANDARD FOR THE FLAMMABILITY (OPEN-FLAME) OF MATTRESSES and **MATTRESS AND FOUNDATION SETS**

Subpart A-The Standard

Sec.

- 1633.1 Purpose, scope and applicability.
- 1633.2 Definitions.
- 1633.3 General requirements.
- 1633.4 Prototype testing requirements.
- 1633.5 Prototype pooling and confirmation testing requirements.
- 1633.6 Quality assurance requirements.
- 1633.7 Mattress test procedure.
- 1633.8 Findings.
- 1633.9 Glossary of terms.

Subpart B-Rules and Regulations

- 1633.10 Definitions.
- 1633.11 Records.
- 1633.12 Labeling.
- 1633.13 Tests for guaranty purposes, compliance with this section, and "one of a kind" exemption.

Subpart C-Interpretations and Policies

```
1633.14 Policy clarification on renovation of mattresses.
```

Figure 1 to Part 1633-Test Assembly, Shown in Furniture Calorimeter (Configuration A)

Figure 2 to Part 1633—Test Arrangement in 3.05m A~ 3.66m (10 ft A~ 12 ft) Room

(Configuration B)

Figure 3 to Part 1633—Details of Horizontal Burner Head

Figure 4 to Part 1633—Details of Vertical Burner Head Figure 5 to Part 1633—Details of Burner Stand-off

Figure 6 to Part 1633—Burner Assembly Showing Arms and Pivots (Shoulder Screws), in

Relation to, Portable Frame Allowing Burner Height Adjustment

Figure 7 to Part 1633—Elements of Propane Flow Control for Each Burner
Figure 8 to Part 1633—Jig for Setting Mattresses and Foundation Sides in Same Plane
Figure 9 to Part 1633—Burner Placements on Mattress/Foundation

Figure 10 to Part 1633—Jig for Setting Burners at Proper Distances from

Mattress/Foundation

Figure 11 to Part 1633—Diagrams for Glossary of Terms

Appendix A to Part 1633—Calibration of Propane Flowmeters

Appendix B to Part 1633-Burner Operation Sequence

Authority: 15 U.S.C. 1193, 1194.

Subpart A-The Standard

§ 1633.1 Purpose, scope, and applicability.

(a) Purpose. This Part 1633 establishes flammability requirements that all mattress and mattress and foundation sets must meet before sale or introduction into commerce. The purpose of the standard is to reduce deaths and injuries associated with mattress fires by limiting the size of the fire generated by a mattress or mattress and foundation set during a thirty minute test.

- (b) Scope. (1) All mattresses and all mattress and foundation sets, as defined in § 1633.2(a) and § 1633.2(b), of any size, manufactured or imported after [the effective date of this standard] are subject to the requirements of the standard.
 - (2) One-of-a-kind mattresses and foundations may be exempted from testing under this standard in accordance with § 1633.13(c).
- (c) Applicability. The requirements of this part 1633 shall apply to each "manufacturer" (as that term is defined in § 1633.2(i)) of mattresses and/or mattress and foundation sets which are manufactured for sale in commerce.

§ 1633.2 Definitions.

In addition to the definitions given in section 2 of the Flammable Fabrics Act as amended (15 U.S.C. 1191), the following definitions apply for purposes of this part 1633.

- (a) Mattress means a resilient material or combination of materials enclosed by a ticking (used alone or in combination with other products) intended or promoted for sleeping upon.
 - (1) This term includes, but is not limited to, adult mattresses, youth mattresses, crib mattresses (including portable crib mattresses), bunk bed mattresses, futons, flip chairs without a permanent back or arms, sleeper chairs, and water beds or air mattresses if they contain upholstery material between the ticking and the mattress core. Mattresses used in or as part of upholstered furniture are also included; examples are convertible sofa bed mattresses, corner group mattresses, day bed mattresses, roll-away bed mattresses, high risers, and trundle bed mattresses. See § 1633.9 Glossary of terms, for definitions of these items.
 - (2) This term excludes mattress pads, mattress toppers (items with resilient filling, with or without ticking, intended to be used with or on top of a mattress), sleeping bags, pillows, liquid and gaseous filled tickings, such as water beds and air mattresses that contain no upholstery material between the ticking and the mattress core, upholstered furniture which does not contain a mattress, and juvenile product pads such as car bed pads, carriage pads, basket pads, infant carrier and lounge pads, dressing table pads, stroller pads, crib bumpers, and playpen pads. See § 1633.9 Glossary of terms, for definitions of these items.
- (b) Foundation means a ticking covered structure used to support a mattress or sleep surface. The structure may include constructed frames, foam, box springs, or other materials, used alone or in combination.
- (c) *Ticking* means the outermost layer of fabric or related material of a mattress or foundation. It does not include any other layers of fabric or related materials quilted together with, or otherwise attached to, the outermost layer of fabric or related material.
- (d) Upholstery material means all material, either loose or attached, between the mattress ticking and the core of a mattress, if a core is present.
- (e) Edge seam means the seam or border edge of a mattress or foundation that joins the top and/or bottom with the side panels.
- (f) Tape edge means an edge seam made by using binding tape to encase and finish raw edges.
 - (g) Binding tape means a fabric strip used in the construction of some edge seams.

- (h) Seam thread means the thread used to form stitches in construction features, seams, and tape edges.
- (i) Manufacturer means an individual plant or factory at which mattresses and/or mattress and foundation sets are manufactured or assembled. For purposes of this Part 1633, an importer is considered a manufacturer.
- (j) Prototype means a specific design of mattress and corresponding foundation, if any, which, except as permitted by § 1633.4(b), is the same in all material respects as, and serves as a model for, production units intended to be introduced into commerce.
- (k) Prototype pooling means a cooperative arrangement whereby one or more manufacturers may rely on a prototype produced by a different manufacturer.
- (I) Production lot means any quantity of finished mattresses or mattress and foundation sets that are produced in a production interval defined by the manufacturer, and are intended to replicate a specific prototype that complies with this part 1633.
- (m) Confirmation test means a premarket test conducted by a manufacturer that is relying on a pooled prototype produced by another manufacturer. A confirmation test must be conducted in accordance with the procedures set forth in § 1633.7 to confirm that the manufacturer can produce a mattress and corresponding foundation, if any, that is identical to the prototype in all material respects.
 - (n) Specimen means a mattress and corresponding foundation, if any, tested under this part.
- (o) Twin size means any mattress with the dimensions 38 inches (in) (96.5 centimeters (cm)) x 74.5 in, (189.2 cm), all dimensions may vary by Å} 1/2 in, (Å} 1.3 cm)
- (p) Qualified prototype means a prototype that has been tested in accordance with § 1633.4(a) and meets the criteria stated in § 1633.3(b).
- (q) Core means the main support system that may be present in a mattress, such as springs, foam, water bladder, air bladder, or resilient filling.
- (r) Accredited Laboratory means a laboratory that has been accredited as competent to perform specific tests or specific types of tests in accordance with all elements of ISO/IEC Standard 17025 by an accreditation body which is recognized by the National Cooperation for Laboratory Accreditation (NACLA).
- (s) Independent Laboratory means one that is able to demonstrate that it is impartial and that it and its personnel are free from any undue commercial, financial and other pressures which might influence their technical judgement. The third-party testing laboratory should not engage in any activities that may endanger the trust in its independence of judgement and integrity in relation to its testing activities. The third-party testing laboratory or its personnel cannot be the designer, manufacturer, supplier, installer, purchaser, owner, user nor maintainer of the item, material or products they test or calibrate nor the authorized representative of any of these parties.

§ 1633.3 General requirements.

(a) Summary of test method. The test method set forth in § 1633.7 measures the flammability (fire test response characteristics) of a mattress specimen by exposing the specimen to a specified flaming ignition source and allowing it to burn freely under well-ventilated, controlled environmental conditions. The flaming ignition source shall be a pair of propane burners. These

burners impose differing fluxes for differing times on the top and sides of the specimen. During and after this exposure, measurements shall be made of the time-dependent heat release rate from the specimen, quantifying the energy generated by the fire. The rate of heat release must be measured by means of oxygen consumption calorimetry.

- (b) Test criteria. When testing the mattress or mattress and foundation set in accordance with the test procedure set forth in § 1633.7, the specimen shall comply with both of the following criteria:
 - (1) The peak rate of heat release shall not exceed 200 kilowatts ("kW") at any time within the 30 minute test; and
 - (2) The total heat release shall not exceed 15 megajoules ("MJ") for the first 10 minutes of the test. In the interest of safety, the test operator should discontinue the test and record a failure if a fire develops to such a size as to require suppression for the safety of the facility.
- (c) Testing of mattress and corresponding foundation. Mattresses to be offered for sale with a foundation shall be tested with that foundation. Mattresses to be offered for sale without a foundation shall be tested alone.
- (d) Compliance with this standard. Each mattress or mattress and foundation set sold or introduced into commerce after [the effective date of this standard] shall meet the test criteria specified in paragraph (b) of this section and otherwise comply with all applicable requirements of this part 1633.

§ 1633.4 Prototype testing requirements.

- (a) Except as otherwise provided in paragraph (b) of this section, each manufacturer shall cause three specimens of each prototype to be tested according to § 1633.7 and obtain passing test results according to § 1633.3(b) before selling or introducing into commerce any mattress or mattress and foundation set based on that prototype, unless the manufacturer complies with the prototype pooling and confirmation testing requirements in § 1633.5.
- (b) Notwithstanding the requirements of paragraph (a) of this section, a manufacturer may sell or introduce into commerce a mattress or mattress and foundation set based on a prototype that has not been tested according to § 1633.3(b) if that prototype differs from a qualified prototype only with respect to:
 - (1) Mattress/foundation size (e.g., twin, queen, king);
 - (2) Ticking, unless the ticking of the qualified prototype has characteristics (such as chemical treatment or special fiber composition) designed to improve performance on the test prescribed in this part; and/or
 - (3) The manufacturer can demonstrate, on an objectively reasonable basis, that a change in any component, material, or method of construction will not cause the prototype to exceed the test criteria specified in § 1633.3(b).
- (c) All tests must be conducted on specimens that are no smaller than a twin size, unless the largest size mattress or mattress and foundation set produced is smaller than a twin size, in which case the largest size must be tested.
- (d) All tests conducted to establish compliance with this section shall be conducted by an accredited, independent laboratory.

- $(\underline{e}\underline{e})(1)$ If each of the three specimens meets both the criteria specified in § 1633.3(b), the prototype shall be qualified. If any one (1) specimen fails to meet the test criteria of § 1633.3(b), the prototype is not qualified.
 - (2) Any manufacturer may produce mattresses and foundations, if any, for sale in reliance on prototype tests performed before [the effective date of this Standard], provided that such tests were conducted in accordance with all requirements of this section and § 1633.7 and yielded passing results according to the test criteria of § 1633.3(b).

§ 1633.5 Prototype pooling and confirmation testing requirements.

- (a) Prototype pooling. One or more manufacturers may rely on a prototype produced by another manufacturer provided that:
 - (1) The prototype meets the requirements of § 1633.4; and
 - (2) The mattresses or mattress and foundation sets being produced based on the prototype have components, materials, and methods of construction that are identical in all material respects to the prototype except as otherwise permitted by § 1633.4(b).
- (b) Confirmation testing. Any manufacturer ("Manufacturer B") producing mattresses or mattress and foundation sets in reliance on a prototype produced by another manufacturer ("Manufacturer A") shall cause to be tested in accordance with § 1633.7 at least one (1) specimen produced by Manufacturer B of each prototype of Manufacturer A upon which said Manufacturer B is relying. The tested specimen must meet the criteria under § 1633.3(b) before Manufacturer B may sell or introduce any mattresses or mattress and foundation sets based on the pooled prototype.
- (c) Confirmation test failure. (1) If the confirmation test specimen fails to meet the criteria of § 1633.3(b), the manufacturer thereof shall not sell any mattress or mattress and foundation set based on the same prototype until that manufacturer takes corrective measures, tests a new specimen, and the new specimen meets the criteria of § 1633.3(b).
 - (2) If a confirmation test specimen fails to meet the criteria of § 1633.3(b), the manufacturer thereof must notify the manufacturer of the prototype of the test failure.

§ 1633.6 Quality assurance requirements.

- (a) Quality assurance. Each manufacturer shall implement a quality assurance program to ensure that mattresses and mattress and foundation sets manufactured for sale are identical in all material respects to the prototype on which they are based. At a minimum these procedures shall include:
 - (1) Controls, including incoming inspection procedures, of all mattress and mattress and foundation set components and materials to ensure that they are identical in all material respects to those used in the prototype;
 - (2) Designation of a production lot that is represented by the prototype; and
 - (3) Inspection of mattresses and mattress and foundation sets produced for sale sufficient to demonstrate that they are identical to the prototype in all material respects.
- (b) Production testing. Manufacturers are encouraged to conduct, as part of the quality assurance program, random testing of mattresses and mattress and foundation sets being produced for sale according to the requirements of §§ 1633.3 and 1633.7.

- (c) Failure of mattresses produced for sale to meet flammability standard. (1) Sale of mattresses and foundations. If any test performed for quality assurance yields results which indicate that any mattress or mattress and foundation set of a production lot does not meet the criteria of § 1633.3(b), or if a manufacturer obtains test results or other evidence that a component or material or construction/assembly process used could negatively affect the test performance of the mattress as set forth in § 1633.3(b), the manufacturer shall cease production and distribution in commerce of such mattresses and/or mattress and foundation sets until corrective action is taken.
 - (2) Corrective actions. A manufacturer must take corrective action when any mattress or mattress and foundation set is manufactured or imported for sale fails to meet the flammability test criteria set forth in § 1633.3(b).

Subpart B-Rules and Requirements

§ 1633.10 Definitions.

- (a) Standard means the Standard for the Flammability (Open-Flame) of Mattresses and Foundations (16 CFR part 1633, subpart A).
- (b) The definition of terms set forth in § 1633.2 of the standard shall also apply to this subpart.

§ 1633.11 Records.

- (a) Test and manufacturing records— General. Every manufacturer (including importers) or other person initially introducing into commerce mattresses or mattress and foundation sets subject to the standard, irrespective of whether guarantees are issued relative thereto, shall maintain the following records:
 - (1) Test results and details of each test performed by or for that manufacturer (including failures), whether for prototype, confirmation, or production, in accordance with § 1633.7. Details shall include: Location of test facility, type of test room, test room conditions, prototype or production identification number, and test data including the peak rate of heat release, total heat release in first 10 minutes, a graphic depiction of the peak rate of heat release and total heat release over time. These records shall include the name and signature of person conducting the test, the date of the test, and a certification by the person overseeing the testing as to the test results and that the test was carried out in accordance with the Standard. For confirmation tests, the identification number must be that of the prototype tested.
 - (2) Video and/or a minimum of eight photographs of the testing of each mattress or mattress and foundation set, in accordance with § 1633.4 (one taken before the test starts, one taken within 45 seconds of the start of the test, and the remaining six taken at five minute intervals, starting at 5 minutes and ending at 30 minutes), with the prototype identification number or production lot identification number of the mattress or mattress foundation set, date and time of test, and name and location of testing facility clearly displayed.
- (b) Prototype records. In addition to the records specified in paragraph (a) of this section, the following records related to prototype testing shall be maintained:
 - (1) Unique identification number for the qualified prototype and a list of the unique identification numbers of each prototype based on the qualified prototype.
 - (2) A detailed description of all materials, components, and methods of construction for each prototype mattress or prototype mattress and foundation set. Such description shall include at a minimum, the specifications of all materials and components, name and location of each material and component supplier, and a physical sample of each material and component of the prototype.
 - (3) A list of which models and production lots of mattresses or mattress and foundation sets are represented by each prototype identification number.
 - (4) Where a prototype is not required to be tested before sale, pursuant to § 1633.4(b), the prototype identification number of the qualified prototype on which the mattress to be offered for sale is based, and, at a minimum, the manufacturing specifications and a description of the materials substituted and/or the size change, photographs or physical specimens of the substituted materials, and documentation based on objectively reasonable

criteria that the change in any component, material, or method of construction will not cause the prototype to exceed the test criteria specified in § 1633.3(b).

- (5) Identification, composition, and details of the application of any flame retardant treatments and/or inherently flame resistant fibers or other materials employed in mattress components.
- (c) Pooling confirmation test records. With respect to pooling confirmation testing, records shall be maintained to show:
 - (1) The prototype identification number assigned by the original prototype manufacturer.
 - (2) Name and location of the prototype manufacturer.
 - (3) Copy of prototype test records, and records required by paragraph (b)(2) of this section.
 - (4) A list of models of mattresses, and/ or mattress and foundation sets, represented by the prototype.
- (d) Quality assurance records. In addition to the records required by paragraph (a) of this section, the following quality assurance records shall be maintained:
 - (1) A written copy of the manufacturer's quality assurance procedures.
 - (2) Records of any production tests performed. Production test records must be maintained and shall include in addition to the requirements of paragraph (a) of this section, an assigned production lot identification number and the identification number of the prototype associated with the specimen tested.
 - (3) For each prototype, the number of mattresses or mattress and foundation sets in each production lot based on that prototype.
 - (4) The duration of manufacture of the production lot, *i.e.*, the start and end dates of production of that lot.
 - (5) Component, material and assembly records. Every manufacturer conducting tests and/or technical evaluations of components and materials and/or methods of construction must maintain detailed records of such tests and evaluations.
- (e) Record retention requirements. The records required under this section shall be maintained by the manufacturer (including importers) for as long as mattresses/foundations based on the prototype in question are in production and shall be retained for 3 years thereafter. Records shall be available upon the request of Commission staff.

§ 1633.12 Labeling.

- (a) Each mattress or mattress/ foundation set subject to the standard shall bear a permanent, conspicuous, and legible label containing:
 - (1) Name of the manufacturer;
 - (2) Location of the manufacturer, including street address, city and state;
 - (3) Month and year of manufacture;

- (4) Model identification;
- (5) Prototype identification number for the mattress; and
- (6) A certification that the mattress complies with this standard.
- (b) The information required on labels by this section shall be set forth separately from any other information appearing on such label. Other information, representations, or disclosures, appearing on labels required by this section or elsewhere on the item, shall not interfere with, minimize, detract from, or conflict with the required information.
- (c) No person, other than the ultimate consumer, shall remove or mutilate, or cause or participate in the removal or mutilation of, any label required by this section to be affixed to any item.

Stevenson, Todd A.

From: William E. Fitch [wm_fitch@ix.netcom.com]

Sent: Monday, March 28, 2005 7:29 PM

To: Stevenson, Todd A.

Subject: Mattress NPR

Omega Point Laboratories, Inc. hereby submits the attached comments on the proposed CPSC Mattress NPR.

William E. Fitch, P.E. Executive Vice President Omega Point Laboratories, Inc. 16015 Shady Falls Road Elmendorf, Texas 78112 wfitch@opl.com voice: 210-635-8130

fax: 210-635-8101 Toll Free (In USA): 800-966-5253

URL: www.opl.com

CONFIDENTIALITY NOTICE: This e-mail message, including any attachments, is for the sole use of the intended recipient and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

3/29/2005



March 24, 2005

Mr. Brian J. Stiger, Chief Bureau of Home Furnishings and Thermal Insulation 3485 Orange Grove Avenue North Highlands, CA 94660

Dear Brian:

I am writing to you on behalf of the Sleep Products Safety Council to bring your attention to the fact that the holes on burners currently being used by both your agency and all of the commercial testing laboratories now testing mattresses and foundations for compliance with California Technical Bulletin 603 (TB 603) are slightly larger than the hole size specified in TB 603.

Enclosed is a February 5, 2005, statement by Dr. Thomas Ohlemiller, a senior fire scientist with the National Institute of Standards and Technology (NIST) who was directly involved with the design of the burners in question and in writing the test protocol for their use (both of which the Bureau has referenced in TB 603). In his statement, Dr. Ohlemiller describes the difference between the aperture size specified in TB 603 and the holes actually drilled in the existing test burners, and his thoughts on the impact of this difference on mattress fire tests performed using such equipment.

Apparently the company that prepared the original technical drawings inadvertently specified that the holes should be drilled using a #53 drill. However, NIST's design for the apparatus specified #55 or #56 drill holes. A second company that actually fabricated the burners followed the technical drawings and used the #53 drill specified there. We have confirmed that all of the burners now in use by the Bureau and all commercial test facilities were made using a #53 drill.

As for the impact of this hole size discrepancy on the results of mattress flammability tests conducted using burners with #53 drill holes, Dr. Ohlemiller states that "NIST has no evidence at this point that the burner hole discrepancy has any appreciable impact on test results."

Please contact me if you have any questions.

Cordially,

Patricia A. Martin Executive Director

Enclosure

501 Wythe Street Alexandria, VA 22314-1917 (703) 683-8371 Fax: (703) 683-4503 www.SafeSleep.org



UNITED STATES DEPARTMENT OF COMMERCE National Institute of Standards and Technology Gaithersburg, Maryland 20899

Clarification on TB 603 Burner Hole Sizes

A pair of gas burner tubes constitutes the source of the flaming exposure for mattress and foundation surfaces in California Technical Bulletin 603 (CTB 603). The burners impinge flames on limited areas of the top of a mattress (for 70 seconds) and the side of a mattress (for 60 seconds). The test follows the consequences of this exposure over the next 30 minutes.

At present, all of the CTB 603 test burners in use by the California Bureau of Home Furnishings and at commercial labs to test mattresses have been made by a single company. An industry representative recently noted that the gas jet holes on both of these burner tubes do not conform to the hole size specification given in the CTB 603 specification. The burner manufacturer utilized a # 53 drill rather than the intended #55 or #56 drills specified (these bracket 0.050 inches); the source of the mix-up appears to lie in shop drawings prepared by a second company. The result is that the holes are 0.058 inches in diameter rather than the nominal 0.050 inches specified. SPSC has established that the sole supplier of the CTB 603 burners made all the commercial units this way.

Such a change does not alter the gas flow or total heat release rate from the burners. However, it has the potential to have shortened the reach of the gas jets, thereby lessening the peak heat flux which a test surface sees. It is not possible to make a reliable estimate by calculation of the change in flux but it is not believed to be a large effect.

The following observations are offered in support of this:

- (1) For the last two years, NIST has been using a hybrid burner system with one burner (side) made by the sole supplier of the complete CTB 603 burner unit and the other (top) made in the NIST shops. This latter burner meets the nominal 0.050 inch hole specification. Experimental results from the Precision and Bias Study from NIST and from two of the other laboratories were in good agreement in spite of this burner difference.
- (2) In addition, NIST (and possibly other laboratories) has observed that nearly all CTB 603 failures result from fires that develop in areas of the mattress or foundation that are both spatially and temporally removed from the brief gas burner exposure. That is, the failure occurs long after the burners are turned off and nearly always on parts of the mattress that are not close to the positions on the mattress where the mattress burners had been placed.

For these reasons, NIST has no evidence at this point that the burner hole discrepancy has an appreciable impact on test results. Therefore, NIST does not foresee at this time any issues if California were to clarify the description of the hole sizes specified in CTB 603 to conform with the size of the holes in the equipment actually in user by California and the commercial labs.

Submitted by T. J. Ohlemiller on Feb. 4, 2005







INTERNATIONAL SLEEP PRODUCTS ASSOCIATION

March 29, 2005

Office of the Secretary Consumer Product Safety Commission Room 502 4330 East-West Highway Bethesda, MD 20814

Re: Mattress NPR Comments

Dear Mr. Secretary:

On behalf of the International Sleep Products Association (ISPA) and the Sleep Products Safety Council (SPSC), representing the U.S. mattress industry, enclosed herewith are further comments on the mattress flammability standard set forth in the notice of proposed rulemaking that that the U.S. Consumer Product Safety Commission has published at 70 Fed. Reg. 2470 (Jan. 13, 2005) to address open-flame ignitions of mattresses and mattress foundations. These comments consist of written comments, with exhibits, which include a "red-line" version of the Commission's proposed standard showing in context our specific textual suggestions and a chart that correlates those sections of the proposed standard for which we have suggested a change to the specific comment to which that change relates.

The enclosed comments supplement those that I presented in written and oral testimony at the public hearing that the Commission held on March 3, 2005.

Please contact me if you have any questions regarding the enclosed comments and other materials.

Sincerely,

Ryan Trainer

Executive Vice President

Pagar Trainer

International Sleep Products Association

Enclosure

Before The U.S. Consumer Product Safety Commission

In re:

Mattress NPR; Standard for the Flammability (Open Flame) of Mattresses and Mattress/Foundation Sets; Proposed Rules, 70 Fed. Reg. 2470 (Jan. 13, 2005)

Public Comments on behalf of
The International Sleep Products Association
and
The Sleep Products Safety Council,
Representing
The U.S. Mattress Industry

Table of Contents

1.	Imported Mattresses and Foundations Should At Least Be Subject to the Same Requirements as Domestically Made Products.		1
	a.	The Term "Importer" Should Be Defined.	1
	b.	The Standard Should Explicitly State That an Importer's Confirmation Testing Duties Apply to Each Foreign Manufacturer of Imported Mattresses.	2
	c.	The Standard's Labeling Requirements Should Require That the Label Identify Both the Foreign Manufacturer and the Importer.	3
	d.	Tests Required by the Standard Should Be Performed by Qualified Labs Identified in Relevant Test Records.	4
	e.	The Records Provision Should Clarify That an Importer Must Maintain Written Quality Assurance Procedures for Each Foreign Manufacturer from Which it Imports and That Each Manufacturer Certify That it Complies with Those Procedures.	4
	f.	The Term "Production Lot" Should Be Defined for Purposes of Imported Mattress Sets At Most to Mean Products of the Same Prototype Imported from the Same Manufacturer at One Time.	5
2.	The Corma Forma Renov	ommission Should Make its Policy Regarding Renovators a l Part of its Standard and Should Clarify the Responsibilities of rators.	5
	a.	The Commission Should Make the Renovation Provisions a Formal Part of the Standard.	5
	b.	To Avoid Consumer Deception, the Label for Renovated Mattresses Should Be Visually Distinct from the Label for New Mattresses, and the Certification for Renovated Mattresses Should Make Clear that Compliance with Part 1633 Does Not Imply That the Renovated Mattress is Sanitary or Hygienic.	7
	c.	The Standard Should Allow Renovators to Place the FTC Reused Stuffing Notice on the Required Label.	8

3.	The Co	ommission Should Clarify the Standard's Effective Date.	8
	a.	The Standard Should Apply to Mattresses Manufactured or Imported After its Effective Date.	8
	b.	The Commission Should Also Allow Retailers One Year to Sell Pre-Standard Mattress Inventories.	8
	c.	The Standard's Effective Date Should Coincide with Regular Model Changes.	9
4.	The In 1633.2 Part 16	dustry Urges the Commission to Modify Several Other Section 2 Definitions and to Define Several Terms Used Elsewhere in 533.	10
	a.	For Clarity and Consistency, the Term "Mattress Set" Should Be Defined.	10
	b.	The Term "Foundation" Should Be Modified to Include All Support Surfaces.	11
	c.	The Term "Manufacturer" Should Encompass Entities That Manufacture Either or Both the Mattress and Foundation.	-12
	d.	The Term "Prototype" Should Be Clarified.	12
	e.	The Term "Prototype Developer" Should Be Defined to Allow for Entities That Are Not Mattress Manufacturers Themselves to Design and Test Prototypes That Can Be Used by Manufacturers, and to Correspondingly Modify the Term "Prototype Pooling."	12
	f.	For Clarity, the Commission Should Define the Term "Model" and Use it Consistently (Instead of Referring to Prototypes That Do Not Require Testing).	14
	g.	The Term "Production Lot" Should Allow Manufacturers to Define it Either in Terms of Time or Quantity of Mattress Sets Produced.	15

5.	The C Issues	ommission Should Clarify Certain Testing and Recordkeeping	15
	a.	The Commission Should Not Require Manufacturers to Maintain Physical Samples of Qualified Prototypes and Should Require Component Controls Only for Materials Critical to the Product's Flammability Performance.	15
	b.	The Commission Should Elaborate on What Constitutes Corrective Action, Referenced in Sections 1633.5 and 1633.6.	16
	c.	The Commission Should Accept Pre-Standard Prototype Tests That Meet the 1633 Test Criteria and Substantially Conform to the Records Requirements.	16
	d.	The Commission Should Clarify That the Test Record Obligation Covers Only Prototype, Confirmation and Production Tests (if any) In Accordance with Section 1633.7.	17
	e.	The Retained Records Should Specify Not Only the Location of the Test Lab, Prototype Developer and Component Supplier, But Their Full Name and Address.	17
	f.	The Standard Should Specify That a Manufacturer May Reasonably Rely on Documentation Provided by its Component and Materials Vendors and Third Parties.	18
	g.	Consistent With Clarified and Additional Definitions Suggested Above for "Prototype" and "Model" (and other suggested changes), Section 1633.11(b) Requires Modification.	18
	h.	The Commission Should Provide That the Required Records be Maintained in the United States and Written in English.	19
6.	The C	commission Should Modify the Test Method in Several Respects.	19
7.	Preen	Commission Should State That the Flammability Standard upts Both Codified State Rules and Civil Claims Based on non Law State Rules That Address the Same Risk of Injury.	21
	Fe	ne Commission Should Make Clear in the Standard that the oderal Mattress Flammability Standard Preempts State Statutes and Regulations That Also Address Mattress Flammability.	21
		ne Commission Should Also Acknowledge That its Standards an Preempt Common Law Rules.	22

c.	Court Decisions Under the Flammable Fabrics Act Preemption Provision Finding No Preemption Are Distinguishable from the Circumstances of the Mattress Standard.	25
d.	A Commission Policy Favoring Common Law Preemption Will Assist Courts in Evaluating the Legal Significance of the Standard and Will Advance Public Policies Supporting Product Safety.	27
Concl	usion	28
Table	of Exhibits	

Public Comments on behalf of
The International Sleep Products Association
and
The Sleep Products Safety Council,
Representing
The U.S. Mattress Industry

The International Sleep Products Association (ISPA) and the Sleep Products Safety Council (SPSC), representing the U.S. mattress industry, jointly provide the following additional comments regarding the draft standard that the U.S. Consumer Product Safety Commission (the "Commission") has proposed (published at 70 Fed. Reg. 2470 (Jan. 13, 2005)) to address open-flame ignitions of mattresses and mattress foundations. These comments supplement the testimony of Ryan Trainer, ISPA Executive Vice President, presented at the Commission's public hearing on March 3, 2005 in this rulemaking.

A red-line version of the proposed standard showing the specific suggested changes discussed below is attached hereto as Exhibit 1.

1. Imported Mattresses and Foundations Should At Least Be Subject to the Same Requirements as Domestically Made Products.

In our hearing testimony, the mattress industry urged the Commission to provide further details of mattress importers' exact obligations under the standard. Below, we suggest specific changes and additions to the proposed standard to implement the industry's suggestions.

a. The Term "Importer" Should Be Defined.

The proposed standard makes repeated reference to importers and some of their duties but does not define the term "importer." Although the statute authorizing this flammability standard is likewise silent on this issue, the Commission's policy regarding imports indicates that the principle party liable for compliance with its safety standards with regard to imported merchandise is the owner or consignee of the imported goods. 16 C.F.R. 1009.3(f)(5).

However, it would not be appropriate in transactions where the imported product is "drop shipped" to the ultimate consumer. Drop-shipping is an increasingly common delivery mode for domestically made products and may become a more popular method for importing mattresses in the future. Therefore, the definition of importer should be sufficiently flexible to take this into account so that foreign producers may not circumvent the requirements of the proposed standard by shipping directly to the U.S. consumer.

For these reasons, we propose that the Commission add the following definition to 1633.2 for importer:

Importer means the owner or consignee (as specified in 16 C.F.R. 1009.3(f)(5)) of an imported mattress set, unless that party is the ultimate consumer of the imported product, in which case it means the U.S.-domiciled party that introduced the product into commerce (including any party that is involved with selling or marketing the imported product to the consumer), a U.S.-domiciled party that is the agent of the manufacturer of the imported product, or any other party involved with manufacturing, selling, or marketing the imported product over which the Commission has jurisdiction. In addition to any other requirements specified for importers under this Part 1633, an importer shall be subject to the same requirements as a manufacturer under this Part.

b. The Standard Should Explicitly State That an Importer's Confirmation Testing Duties Apply to Each Foreign Manufacturer of Imported Mattresses.

Section 1633.5 requires each manufacturer (which Section 1633.2(i) defines as an individual manufacturing facility) to perform a confirmation test for each qualified mattress prototype that it manufactures that was developed by another party. The purpose of this test is to require the manufacturer to demonstrate that it can replicate a qualified prototype developed by someone else. A fundamental principle of the proposed standard is that an importer is subject to the same legal obligations as a U.S. manufacturer.

The draft standard provides that an importer is equivalent to a manufacturer. The industry is concerned, however, that an importer might interpret that to mean that it is required only to perform a single confirmation test burn for each mattress prototype that it imports, regardless of how many foreign manufacturers actually make mattresses under that prototype for the importer.

To avoid such a scenario – which would undermine the objectives of Part 1633 – the industry believes that the standard should explicitly state that an importer is **not** to be considered a single manufacturer for testing, labeling and quality assurance purposes. Rather, an importer should be required to meet the same testing and documentation requirements for **each distinct foreign manufacturer from which it imports**. In this regard, it is also important that the Commission carefully distinguish between the actual

foreign manufacturer of the imported goods and the foreign exporter of those goods, which can be the same entity but which can also export products manufactured by any number of separate manufacturers.

To address these concerns, we urge the Commission to add the following to the end of Section 1633.5(b) (which concerns the proposed confirmation test requirements):

In the case of imported mattress sets, the importer shall be responsible for documenting that confirmation tests have been performed with respect to mattress sets produced by each foreign manufacturing facility whose mattress sets that importer is importing. Specifically, before the importer may sell or introduce into commerce any imported mattress sets based on a pooled prototype, the importer must obtain documentation from each foreign manufacturing facility from which it imports mattress sets stating that the foreign facility has caused to be tested in accordance with Sec. 1633.7 at least one (1) specimen produced by that facility of each qualified prototype upon which that manufacturing facility is relying to make the imported mattress sets.

(Note that in the suggested wording above, we use the term "mattress set," which we propose below in section 4(a) of these comments that the Commission explicitly define under Section 1633.2 to apply to mattresses or mattress foundations intended to be sold separately or as sets, as applicable.)

c. The Standard's Labeling Requirements Should Require That the Label Identify Both the Foreign Manufacturer and the Importer.

With regard to labeling requirements under Section 1633.12, we urge the Commission to clarify the specific obligations for imported goods. We suggest that the Commission require that the name of both the importer (as defined above) and the actual foreign mattress manufacturer be clearly identified on the label. Such information will help facilitate the process of identifying who is the importer for record keeping purposes and who is the actual foreign manufacturer for testing obligations. Otherwise, it would be difficult if not impossible for the Commission to confirm that particular imported mattresses were in fact manufactured in compliance with the standard.

Specifically, we urge the Commission to modify Section 1633.12(a)(1) to read as follows:

Name of the manufacturer, or for imported mattresses or foundations, the name of the foreign manufacturer and the importer;

Likewise, Section 1633.12(a)(2) should be modified to require that the label identify the country in which an imported mattress set was made (in addition to the manufacturer's street address, city and state already required by the proposed standard).

d. Tests Required by the Standard Should Be Performed by Qualified Labs Identified in Relevant Test Records.

In terms of the testing itself, it is important that the tests be performed by qualified laboratories. The test method specified in this standard is a relatively complex procedure that requires trained and experienced staff using sophisticated equipment. It is therefore critical that foreign mattresses be tested according to the same processes and in a comparable manner as those performed in this country. For this reason, we urge the Commission to require that foreign made mattresses be tested only by laboratories that have demonstrated to an objective third party that the lab in question is suitably qualified to perform the tests required in a competent, thorough and consistent manner, and the laboratory performing the test should be identified in the relevant records. Specifically, we urge the Commission to add paragraph (k) at the end of Section 1633.7 that reads as follows:

The above tests should be performed only by a laboratory (regardless of whether it is independent of or related to the manufacturer) that has demonstrated to an objective third party that it is qualified to perform the tests in a competent, thorough and consistent manner.

Likewise, Section 1633.11(a)(1) should be modified to require both the name and address of the test lab.

e. The Records Provision Should Clarify That an Importer Must Maintain Written Quality Assurance Procedures for Each Foreign Manufacturer From Which it Imports and That Each Manufacturer Certify That it Complies with Those Procedures.

Section 1633.11(d)(1) requires that a written copy of the manufacturer's quality assurance procedures be maintained. Since the proposed standard generally provides that an importer has the same obligations as a manufacturer, an importer might contend that it need only maintain a written copy of only one quality assurance procedure, regardless of whether it imports products made by one or more manufacturers. Such an interpretation would defeat the purpose of the requirement and undermine product safety.

In order to remove all doubt as to the importer's duties, and to document that the foreign manufacturer actually follows those requirements, the mattress industry urges the Commission to modify Section 1633.11(d)(1) to read as follows:

A written copy of the manufacturer's quality assurance procedures; in the case of imported mattress sets, the importer shall maintain a written copy of the quality assurance procedures followed by each foreign manufacturer that produces the mattress sets it imports and a certificate signed by an official of the foreign manufacturer stating that it follows those procedures.

f. The Term "Production Lot" Should Be Defined for Purposes of Imported Mattress Sets At Most to Mean Products of the Same Prototype Imported From the Same Manufacturer at One Time.

The production lot concept defined in Section 1633.2(1) is intended to help identify the scope of merchandise that may be subject to corrective action in the event that the Commission or manufacturer finds that the standard has not been met. That is, if quality issues are identified as a result of the quality assurance process, or the manufacturer becomes aware that its products do not meet the standard (either as a result of a burn test performed on a sample taken from the production lot or otherwise), then the manufacturer must take appropriate "corrective action" with regard to that lot.

While a flexible approach such as this may be appropriate for U.S.-based manufacturers that are supplying goods to the U.S. market on a regular and ongoing basis, it is not suitable for imported goods that enter the United States in a more sporadic manner. In the case of imported products, which tend to enter the United States in one or more containers at the same time, it would be appropriate that such batches be relevant for targeting corrective action in case standard compliance problems are identified with regard to such batches. Unless a manufacturer performs its required quality assurance processes for each shipment of goods to the United States, it will in effect be impossible for it to take appropriate corrective action.

Therefore, we urge the Commission to add the following at the end of the production lot definition:

except that for imported products, a production lot should not be larger than the quantity of products intended to replicate a specific qualified prototype imported at the same time.

2. The Commission Should Make its Policy Regarding Renovators a Formal Part of its Standard and Should Clarify the Responsibilities of Renovators.

As the industry stated during the Commission's hearing, we agree with the substance of proposed Part 1633 Subpart C which states that as a matter of policy, the agency considers renovated mattresses to be subject to the same requirements as new mattresses. Nevertheless, we urge the Commission to strengthen and clarify this concept in the following respects:

a. The Commission Should Make the Renovation Provisions a Formal Part of the Standard.

The Commission's designation of Subpart C as merely the agency's interpretation and policy suggests that it has less legal significance than the other sections of the standard. We urge the Commission to make clear in the standard itself that renovation activities are manufacturing activities subject to the standard.

This can be accomplished by adding two definitions to Section 1633.2 for "mattress renovation" and "renovated mattress" that reads as follows:

Mattress renovation means one or more of any of the following operations: replacing the ticking or batting on a mattress or foundation, stripping a mattress or foundation to its springs, rebuilding a mattress or foundation, or replacing components with new or recycled materials. Mattress renovation performed in connection with the sale or offer for sale of a renovated mattress (which would not include a service provided for a party that intends to take back the mattress or foundation for its own use, or title to the mattress or foundation otherwise does not change to another party), shall be considered for purposes of this Part to be manufactured for sale, and therefore subject to the same testing, recordkeeping and other requirements of this Part, unless otherwise specified or the renovated product qualifies for a one-of-a-kind exemption.

Renovated mattress means a mattress and/or foundation that has undergone mattress renovation.

To eliminate redundancy, the policy statement in Subpart C can be shortened to read as follows:

Sec. 1633.14 Policy clarification on renovation of mattresses.

- (a) Section 3 of the Flammable Fabrics Act (15 U.S.C. 1192) prohibits, among other things, the "manufacture for sale" of any product which fails to conform to an applicable standard issued under the Act. The standard for the Flammability (Open-Flame) of Mattresses and Foundations in subpart A of this part, issued pursuant to the Act, provides that, with certain exceptions, mattresses must be tested according to a prescribed method.
- (b) The purpose of this subpart is to inform the public that mattresses renovated for sale are considered by the Commission to be mattresses manufactured for sale and, therefore, subject to the requirements of the open-flame Mattress Standard. The Commission believes that this policy clarification will better protect the public against the unreasonable risk of fires leading to death, personal injury or significant property damage, and assure that purchasers of renovated mattresses receive the same protection under the Flammable Fabrics Act as purchasers of new mattresses.
- (c) Accordingly, the standard defines the terms mattress renovation and renovated mattress in paragraphs (--) and (--) of section 2.

b. To Avoid Consumer Deception, the Label for Renovated Mattresses Should Be Visually Distinct From the Label for New Mattresses, and the Certification for Renovated Mattresses Should Make Clear that Compliance with Part 1633 Does Not Imply That the Renovated Mattress is Sanitary or Hygienic.

It is important that consumers do not misinterpret a renovator's compliance with the proposed standard to mean that a renovated product is equivalent in all respects to a mattress set made from new components. Renovated mattresses are often made from mattresses that have been used by other consumers for many, many years. The used mattress is often soiled and stained with urine, excrement and blood. It can often be infested with insects and other organisms, including dust mites that feed on dead skin cells that can become ingrained in mattress ticking, particularly when the consumer does not regularly launder his or her sheets and pillow cases. The feces of these dust mites pose serious problems for children and adults that suffer from asthma and other respiratory ailments. See "Final Report for Mites and Allergens in Mattresses," Larry G. Arlian, Ph.D., Dept. of Biological Sciences, Wright State University, Dayton, Ohio, March 24, 2000 (attached hereto as Exhibit 2) and "Tiny Mites in Mattresses Trigger Health Concerns," *BedTimes*, Dec. 1999 at 19-20 (attached hereto at Exhibit 3).

For these reasons, we urge the Commission to modify the labeling provision set forth in Section 1633.12 in the following respects:

- Limit the scope of Section 1633.12(a) to new mattress sets and provide that that label be printed on white material.
- Set somewhat different label content requirements in a new provision designated as Section 1633.12(b) for renovated mattresses (and redesignate Sections 1633.12(b) and (c) as Sections 1633.12(c) and (d)) and require that the label for renovated mattress sets be printed on a different color of paper than the new mattress label (e.g., yellow for renovated mattresses and white for new mattresses) in order that consumers can easily distinguish between new and renovated mattresses. We propose that such a provision might read as follows:

Each renovated mattress set subject to the standard shall bear a permanent, conspicuous, and legible yellow label printed with lettering in black ink containing:

- (1) Name of the renovator, or for imported mattresses or foundations, the name of the foreign renovator and the importer;
- (2) Location of the renovator, including street address, city, state and country (if not the United States);
 - (3) Month and year of renovation;
 - (4) Model identification;

- (5) Prototype identification number for the renovated mattress set; and
- (6) A certification that the renovated mattress set complies with the fire performance requirements of this standard, but that since some or all of the internal materials used to make the renovated mattress have been used by other consumers, compliance with the flammability standard does not mean that the renovated mattress set is clean, hygienic, or sanitary in terms of being free of human or animal blood, urine, feces, insects, other organisms, mold or allergens.

c. The Standard Should Allow Renovators to Place the FTC Reused Stuffing Notice on the Required Label.

Section 4(h) of the Textile Fiber Products Identification Act, 15 U.S.C. § 70b(h), which is administered by the Federal Trade Commission, requires that mattresses made from post-consumer upholstered materials – called "reused stuffing" under the statute – be so labeled. For efficiency and to avoid oversight, we urge the Commission to coordinate with the FTC to provide that renovated products may bear the FTC disclosure on the yellow renovator's label discussed above. This could be accomplished by adding a paragraph (7) to the new Section 1633.12(b) proposed above that is worded as follows:

The statement required by the Section 4(h) of the Textile Fiber Products Identification Act, 15 U.S.C. § 70b(h), notifying consumers that the renovated mattress set contains "reused stuffing" may be placed on the label required by this provision.

3. The Commission Should Clarify the Standard's Effective Date.

The proposed standard appears to be inconsistent as to when it will become effective. We urge the Commission to clarify this point and to take into account several other factors when setting the effective date of these requirements.

a. The Standard Should Apply to Mattresses Manufactured or Imported After Its Effective Date.

Section 1633.1(b)(1) provides that all mattresses and foundations "manufactured or imported" after the effective date of the standard must meet those requirements. However, under Section 1633.3(d), the operative phrase is mattresses "sold or introduced into commerce" after the standard's effective date. The industry urges the Commission to resolve this inconsistency by changing 1633.3(d) to substitute "manufactured or imported" for "sold or introduced into commerce." This will allow for mattress manufacturers and retailers to sell existing pre-standard inventories in an orderly manner.

b. The Commission Should Also Allow Retailers One-Year to Sell Pre-Standard Mattress Inventories.

Although the industry believes that applying the new standard to products made or imported after its effective date is appropriate, the industry also believes that there should be a reasonable deadline – for example, one-year following the standard's effective date – for pre-standard product to be sold.

A provision such as this would serve two purposes. First, it would limit the ability for parties to attempt to circumvent the new standard's requirements by illegally "backdating" the manufacturing date. If pre-effective date mattresses could not be sold after a specific date, the incentive to backdate the label would disappear. One-year would be a reasonable transition period given that the vast majority of the manufacturing and retail segments of the industry operate largely on a "Just-In-Time" basis, resulting in extremely small to non-existent inventories of finished goods.

Second, a 12-month deadline would limit commercial sales of used pre-standard product. This is important because such sales – like sales of renovated mattresses that do not meet the new standard's requirements – would hinder the new standard's effectiveness by in effect extending the useful life of a product that is not manufactured to resist open-flame ignitions. Just as the Commission believes that consumers will be better protected from injuries caused by mattress fires if renovated mattresses are subject to the proposed standard, consumer protection will be further advanced if pre-standard mattresses of any kind cannot be sold 12 months after the standard's effective date.

The objectives described above can be achieved by adding the following sentence to the end of Section 1633.3(d):

Mattress sets manufactured or imported on or before [the effective date of this standard] may not be sold or introduced into commerce more than 12 months after that date.

c. The Standard's Effective Date Should Coincide with Regular Model Changes.

The Commission proposes that the standard be made effective 12 months after the requirements are finalized. Nevertheless, the industry generally announces new products in March and November of each year. In general, the new products announced at these intervals are available at retail on or about the following July 1 and January 1.

Implementing the new standard will require product and price changes that are significant enough to require a formal new product introduction. In many cases, it will also require replacement of most if not all floor models in a retailer's showroom and retraining of retail sales associates.

To avoid requiring the industry in effect to make an additional new product introduction during the year that the standard becomes effective, the industry urges the Commission to time the effective date of the standard to coincide with when new models typically become available at retail. That will allow manufacturers to show the Part 1633-compliant products to prospective retailer customers at the March/November new model announcement cycles.

Thus, rather than implement the standard as proposed twelve months after the standard is approved, the industry urges the Commission to make it effective the earlier of January 1 or July 1 following the twelfth month after the standard is finalized so that compliance can coincide with regular model changes.

- 4. The Industry Urges the Commission to Modify Several Other Section 1633.2 Definitions and to Define Several Terms Used Elsewhere in Part 1633.
 - a. For Clarity and Consistency, the Term "Mattress Set" Should Be Defined.

Proposed Part 1633 is not consistent in its use of the terms "mattress" and "mattress set." For example, it refers to "mattress" in a context in which "mattress set" is probably intended (e.g., Section 1633.12(a)(5)), and other times it uses the awkward phrase "mattress or mattress/foundation set" (e.g., Section 1633.12(a)). Confusion resulting from the inconsistent use of these terms, as well as the wordiness of the provisions, can be minimized if the term "mattress set" is defined in Section 1633.2 as follows (and the corresponding references to these terms are modified to conform to the definition):

Mattress set means the mattress and foundation, if any, offered by the mattress manufacturer for sale as a set, or a mattress alone or a foundation alone if the manufacturer intends for the mattress or the foundation to be offered for sale without a corresponding mattress or foundation manufactured by the same company.

This definition would also clarify (1) which mattress and foundation should be considered to be a "set" for prototype testing purposes (that is, the mattress and foundation that the manufacturer offers for sale as a set) and (2) that a mattress that the manufacturer offers for use alone (that is, without a foundation) would in that case constitute a mattress set. The industry believes that this approach is appropriate, given that a manufacturer has no way of knowing exactly how the mattress and foundation may be sold at retail or used by the consumer.

For example, rather than buy both the mattress and foundation that the manufacturer offers as a set, some consumers will want only a mattress for use either on the consumer's old foundation, on a platform or on the floor. In most cases, the retailer will oblige and sell the mattress separately. But since the manufacturer has no control over this aspect of the distribution process, it should logically be required to test only the

mattress and foundation set, and not all of the numerous permutations that could arise depending on how the consumer actually uses the mattress.

In other cases, the consumer will want to buy a mattress manufactured by one company and a foundation manufactured by a different company. This will occur most frequently when the consumer buys only the mattress part of a mattress/foundation combination that the manufacturer offers for sale as a set, and intends to use that mattress on an adjustable foundation made by another company. Again, the mattress manufacturer should be responsible only for testing the product in the manner in which it offers the product. It would be illogical to require the mattress manufacturer to test its product with all combinations of adjustable foundations that could possibly be used with its mattress.

In this regard, however, the industry notes that the test method proposed may be inadequate for these circumstances. As discussed in further detail below in section 6 of these comments:

- The proposed test method requires that mattresses alone be tested on a metal frame. However, this frame does not reflect how a mattress alone will actually be used by real world consumers.
- The proposed test method does not contemplate the testing of foundations alone.

As noted below, we request that the Commission consider revising its test method to take these situations into account.

In light of these considerations, Section 1633.3(c) should also be changed to correspond to the mattress set definition and other issues discussed above to read as follows:

Testing of mattress set. Mattresses that the manufacturer offers for sale with a foundation as a mattress set shall be tested with that foundation. Mattresses or foundations offered by the manufacturer for sale alone shall be tested alone.

In addition, we urge the Commission to consider who has the testing responsibility when a manufacturer offers as a set a mattress that it produces and a foundation manufactured by a third party.

b. The Term "Foundation" Should Be Modified to Include All Support Surfaces.

Many foundations are covered with ticking. Others can have a resilient surface but no ticking. The Commission should consider modifying the proposed definition for "foundation" in Section 1633.2(b) as follows:

Foundation means a structure used to support a mattress or sleep surface. The structure may include constructed frames, foam, box springs, or other materials, used alone or in combination.

c. The Term "Manufacturer" Should Encompass Entities That Manufacture Either or Both the Mattress and Foundation.

As proposed, Section 1633.2(i) in effect presumes that manufacturers do not make foundations alone, which, however, can occur. The industry proposes that this term be modified as follows:

Manufacturer means an individual plant or factory that manufactures or assembles mattresses, foundations, or mattress sets.

d. The Term "Prototype" Should Be Clarified.

Section 1633.2(j) defines prototype in terms of "corresponding" mattresses and foundations, but does not define who determines which products correspond to each other and under what circumstances. As noted above in suggesting that the term "mattress set" be defined, the industry proposes that the mattress manufacturer be responsible for deciding the corresponding mattress and foundation. As such, the "prototype" definition can be simplified by reference to the 'mattress set" definition, and by separately defining the term "model" (discussed below in section 4(f) of these comments) to refer to how similar a model must be to a qualified prototype.

Therefore, we propose that Section 1633.2(j) be reworded as follows:

Prototype means a specific design of mattress set that provides the basis for production of mattress models that are similar to the prototype, as described in Sec. 1633.4(b).

e. The Term "Prototype Developer" Should Be Defined to Allow for Entities That Are Not Mattress Manufacturers Themselves to Design and Test Prototypes That Can Be Used by Manufacturers, and to Correspondingly Modify the Term "Prototype Pooling."

The proposed Section 1633.2(k) definition for "prototype pooling" assumes that only mattress manufacturers will develop prototypes. While that is how prototypes are developed today, the industry does not want to foreclose the possibility of component suppliers or other third parties designing and qualifying prototypes as a service to mattress manufacturers. In addition, the proposed term does not expressly include situations in which independent manufacturers work together – either under a formal legal structure or informally – to develop prototypes that they can each use. To address these issues, we urge the Commission to modify Section 1633.2(k) as follows:

Prototype pooling means a cooperative arrangement whereby one or more manufacturers may rely on a prototype produced by a different party or a consortium of manufacturers and/or third parties.

We also urge the Commission to define a new term of "prototype developer" as follows:

Prototype developer means a mattress manufacturer, a third party or a consortium of manufacturers and/or third parties that develops a prototype.

For consistency with this and other changes proposed in this part of the industry's comments, Section 1633.5 should be modified. This provision also uses the phrase "identical in all material respects" in a context in which the word "material" means "significant" as opposed to the physical composition of the product. For clarity, we suggest replacing the word "material" with "significant" both here and elsewhere in Part 1633 where similar usage occurs as follows:

- (a) Prototype pooling. One or more manufacturers may rely on a qualified prototype produced by a prototype developer provided that:
 - (1) The prototype meets the requirements of Sec. 1633.4; and
- (2) The mattress sets being produced based on the prototype have components, materials, and methods of construction that are identical in all significant respects to the prototype except as otherwise permitted by Sec. 1633.4(b).
- (b) Confirmation testing. Any manufacturer producing mattress sets in reliance on a prototype qualified by a prototype developer shall cause to be tested in accordance with Sec. 1633.7 at least one (1) specimen produced by that manufacturer of each qualified prototype upon which that manufacturer is relying. The tested specimen must meet the criteria under Sec. 1633.3(b) before the manufacturer may sell or introduce any mattress sets based on the pooled prototype. In the case of imported mattress sets, the importer shall be responsible for documenting that confirmation tests have been performed with respect to mattress sets produced by each manufacturing facility of mattress sets that the importer is importing. Specifically, before the importer may sell or introduce any imported mattress sets based on a pooled prototype, the importer must obtain documentation from each foreign manufacturing facility from which it imports mattress sets that the foreign facility has caused to be tested in accordance with Sec. 1633.7 at least one (1) specimen produced by that facility of each qualified prototype upon which that manufacturing facility is relying to make the imported mattress sets.
- (c) Confirmation test failure. (1) If the confirmation test specimen fails to meet the criteria of Sec. 1633.3(b), the manufacturer thereof shall not sell any mattress or mattress and foundation set based on the same prototype until that manufacturer takes corrective measures, tests a new specimen, and the new specimen meets the criteria of Sec. 1633.3(b).
- (2) If a confirmation test specimen fails to meet the criteria of Sec. 1633.3(b), the manufacturer thereof must notify the developer of the corresponding prototype of the test failure.

f. For Clarity, the Commission Should Define the Term "Model" and Use it Consistently (Instead of Referring to Prototypes That Do Not Require Testing).

In explaining how qualified prototypes can be the basis for closely similar mattress sets, the Commission variously refers to "models" (e.g., Section 1633.2(k)) and untested prototypes (e.g., Section 1633.4(b)). It appears that both are referring to the same concept.

For consistency and to avoid confusion that could result between prototypes that do and those that do not require testing, the industry suggests that the term "model" be specifically defined and that that term be used consistently throughout the standard. We suggest that "model" be defined as follows:

Model means a mattress set that is identical in all significant respects to a qualified prototype or, based on objectively reasonable criteria, is not sufficiently different from a qualified prototype such that the difference in any component, material, or method of construction between the prototype and the model will cause the model to exceed the test criteria specified in Sec. 1633.3(b).

For consistency with this and the preceding definitional suggestions, Section 1633.4(b) (detailing prototype testing requirements) should be modified as follows:

Notwithstanding the requirements of paragraph (a) of this section, a manufacturer may sell or introduce into commerce a model of a qualified prototype without testing the model according to Sec. 1633.3(b) if the model differs from a qualified prototype only with respect to:

- (1) Mattress/foundation size (e.g., twin, queen, king);
- (2) Ticking, unless the ticking of the qualified prototype has characteristics (such as chemical treatment or special fiber composition) designed to improve performance on the test prescribed in this part; and/or
- (3) The manufacturer can demonstrate, on an objectively reasonable basis, that a difference in any component, material, or method of construction between the prototype and the model will not cause the model to exceed the test criteria specified in Sec. 1633.3(b).

Likewise, Section 1633.6(a) (dealing with quality assurance requirements) should be modified. In this regard, the industry also urges the Commission to limit its requirement as to component controls to those that are critical to the performance of the product under Section 1633.3. This point is discussed further in section 5(a) below of these comments. Therefore, the industry urges the Commission to revise Section 1633.6(a) as follows:

Quality assurance. Each manufacturer shall implement a quality assurance program to ensure that mattress models manufactured for sale are sufficiently similar for purposes of Section 1633.4(b) in all significant respects to the

qualified prototype on which they are based. At a minimum these procedures shall include:

- (1) Controls, including incoming inspection procedures, of all mattress set components and materials that are critical to the performance of the models under Section 1633.3 to ensure that they are identical in all significant respects to those used in the qualified prototype;
 - (2) Designation of a production lot that is represented by the prototype; and
- (3) Inspection of mattress models produced for sale sufficient to demonstrate that they are sufficiently similar to the qualified prototype on which they are based.

g. The Term "Production Lot" Should Allow it to be Defined Either in Terms of Time or Quantity of Mattress Sets Produced.

Section 1633.2 (l) of the proposed standard provides little guidance on how to define a production lot. We urge the Commission to allow producers in general to define this either in terms of production time or quantity by modifying the first part of this provision as follows:

Production lot means any quantity of finished mattress sets that are produced in a production interval defined by the manufacturer (either in terms of quantity or time), and are intended to replicate a specific prototype.

5. The Commission Should Clarify Certain Testing and Recordkeeping Issues.

a. The Commission Should Not Require Manufacturers to Maintain Physical Samples of Qualified Prototypes and Should Require Component Controls Only for Materials Critical to the Product's Flammability Performance.

At the hearing, the mattress industry urged the Commission to not require mattress manufacturers to maintain physical samples of materials used in qualified prototypes. The same objective can be accomplished through test and quality certificates and other documentation that would be required under a proper quality assurance program. It is much easier to maintain records concerning the quality of the materials used than it would be to store physical samples of those materials, which can get lost and mislaid easily over time. This change can be implemented by deleting the sampling requirement from Section 1633.11(b)(2).

In addition, we suggest that the Commission modify its requirement in Section 1633.6(a)(1) regarding the scope of component and materials controls required for quality assurance. A typical mattress can be assembled from literally dozens of different components. Depending on how a specific manufacturer decides to comply with Part 1633, those components and materials that would be critical to whether its products pass or fail the test would include the foam or padding material, tape edge, thread, and FR materials (e.g., the FR barrier). Many other components and materials (e.g., the steel

coils and spring units, the border rods that form the inner perimeter of the mattress, "hog rings" that attach many of the inner components to the border rods, staples, corner guards and product labels) will have no impact in most cases on the performance of the finished mattress set under Part 1633.

For these reasons, the industry urges the Commission to provide that manufacturers be required under 1633.6(a)(1) to control only those components and materials that are critical to the flammability of the finished set. This can be accomplished by revising this provision to read as follows:

Controls, including incoming inspection procedures, of all mattress set components and materials that are critical to the performance of the models under Section 1633.3 to ensure that they are identical in all significant respects to those used in the qualified prototype;

b. The Commission Should Elaborate on What Constitutes Corrective Action, Referenced in Sections 1633.5 and 1633.6.

The Commission refers several times in Sections 1633.5 and 1633.6 (for prototype pooling and quality assurance) to certain "corrective action" that must be taken under particular circumstances. Although other regulations issued by the Commission discuss such action in further detail, it would be useful to mattress manufacturers that will refer to this standard in designing, qualifying and manufacturing mattresses – but that may not be familiar with other CPSC regulations – for the Commission to elaborate briefly on specific corrective actions that might be required of mattress manufacturers.

c. The Commission Should Accept Pre-Standard Prototype Tests That Meet the 1633 Test Criteria and Substantially Conform to the Records Requirements.

Section 1633.4(d)(2) recognizes that many mattress manufacturers have already conducted hundreds of prototype qualification tests and that such tests do not need to be performed again once Part 1633 becomes effective if those prototypes meet the Part 1633 pass-fail criteria. However, Section 1633.11 requires that prototype tests be documented in a certain manner.

The Commission formally proposed the standard in January 2005 and the final requirements of 1633.11 will not be known for several additional months. Therefore, it is possible that manufacturers that have conducted or will soon conduct prototype tests might not have documented them in exactly the manner that the Commission will ultimately specify in Section 1633.11. We urge the Commission to recognize that "grandfathering" these pre-1633 prototype tests is appropriate even if the records generated from those tests do not exactly conform with the records requirements set forth in Section 1633.11. This can be accomplished by adding the following phrase at the end of 1633.4(d)(2):

provided that the records from those tests substantially comply with the requirements of Section 1633.11.

d. The Commission Should Clarify That the Test Record Obligation Covers Only Prototype, Confirmation and Production Tests (if any) in Accordance with Section 1633.7.

Some mattress manufacturers conduct many tests other than the prototype, confirmation and production testing specified in the draft mattress flammability standard. For example, they test new designs and materials as a regular part of their new product development activities. They also evaluate and qualify new materials and alternate materials suppliers on a routine basis and may test products to different standards set by various customers or for particular applications. Logically, there is no reason that manufacturers should be required by Part 1633 to maintain these other records for purposes of the flammability standard.

Therefore, we urge the Commission to clarify the scope of Section 1633.11(a)(1) to make clear that the recordkeeping obligations under this standard apply only to the tests required by Part 1633, and do not require that a manufacturer to maintain records of any other types of tests that it performs. For example, we urge the Commission to modify the first sentence of 1633.11(a)(1) to read as follows:

Test results and details of each test performed by or for that manufacturer (including failures) for prototype, confirmation, and production in accordance with Sec. 1633.7.

Likewise, we urge the Commission to limit the retention of component, material and assembly test records required by Section 1633.11(d)(5) to those performance critical components and materials used in a qualified prototype, as follows:

Component, material and assembly records. Every manufacturer conducting tests and/or technical evaluations of components and materials that are critical to the performance of models under Section 1633.3 and/or methods of construction used in a qualified prototype must maintain detailed records of such tests and evaluations.

e. The Retained Records Should Specify Not Only the Location of the Test Lab, Prototype Developer and Component Supplier, But Their Full Name and Address.

As proposed, Section 1633.11(a)(1) requires only the location of the test lab. In order to obtain more complete information in this regard, the industry urges the Commission to substitute "name and full address" for "location." We urge the same change with respect to the name and location of the prototype developer required by Section 1633.11(c)(2) and the component suppliers required by Section 1633.11(b)(2).

f. The Standard Should Specify That a Manufacturer May Reasonably Rely on Documentation Provided by its Component and Materials Vendors and Third Parties.

To confirm that a manufacturer may rely upon information – in the form of test certificates, MSDSs, etc. – in concluding that a model is sufficiently similar to a prototype, we urge the Commission to add the following provision to Section 1633.11(b):

Acceptable forms of objectively reasonable criteria referred to in paragraph (b)(3) of this section may include test data, certificates of analysis, quality or the like, Material Safety Data Sheets or other information provided by a vendor of materials or another third party.

Likewise, Section 1633.11(d)(5) should be modified to make clear that the required component, material and assembly records "may be conducted by the manufacturer or importer, suppliers of the component or material, or a third party."

g. Consistent With Clarified and Additional Definitions Suggested Above for "Prototype" and "Model" (and other suggested changes), Section 1633.11(b) Requires Modification.

Section 1633.11(b) confusingly refers to prototypes that require testing and those that do not. To clarify this provision and the next (dealing with prototype and pooling confirmation test records), and consistent with several definitional suggestions above, the mattress industry urges the Commission to modify Section 1633.11(b) and (c) as follows:

- (b) Prototype records. In addition to the records specified in paragraph (a) of this section, the following records related to prototype testing shall be maintained:
- (1) A list of the unique prototype identification numbers for each qualified prototype and the unique model identification numbers based on each qualified prototype.
- (2) A detailed description of all materials, components, and methods of construction for each prototype. Such description shall include at a minimum, the specifications of all materials and components, name and full address of each material and component supplier.
- (3) For a given mattress model, the identification number of the qualified prototype on which the model to be offered for sale is based, and, at a minimum, the manufacturing specifications and a description of the materials substituted and/or the size change, photographs or physical specimens of the substituted materials, and documentation based on objectively reasonable criteria that the difference in any component, material, or method of construction between the prototype and the model will not cause the model to exceed the test criteria specified in Sec. 1633.3(b).
- (4) Acceptable forms of objectively reasonable criteria referred to in paragraph (b)(3) of this section may include test data, certificates of analysis, quality or the

like, Material Safety Data Sheets or other information provided by a vendor of materials or another third party.

- (5) Identification, composition, and details of the application of any flame retardant treatments and/or inherently flame resistant fibers or other materials employed in mattress components.
- (c) Pooling confirmation test records. With respect to pooling confirmation testing, records shall be maintained to show:
 - (1) The prototype identification number assigned by the prototype developer.
 - (2) Name and full address of the prototype developer.
- (3) Copy of prototype test records, and records required by paragraph (b)(2) of this section.
 - (4) A list of mattress models based on the prototype.

In addition, the "model" concept makes proposed Section 1633.11(b)(3) redundant. For this reason, it has been omitted from above.

h. The Commission Should Provide That the Required Records be Maintained in the United States and Written in English.

The manufacturer or importer should be required to maintain the mandated records at a location in the United States. Furthermore, these records should be in English. This can be accomplished by modifying Section 1633.11(e) as follows:

Record retention requirements. The records required under this section shall be maintained by the manufacturer (including importers) at its place of business (if in the United States) or at a designated location in the United States for as long as mattress models based on the prototype in question are in production and shall be retained for 3 years thereafter. Records shall be written in the English language and available upon the request of Commission staff.

6. The Commission Should Modify the Test Method in Several Respects.

As a result of experience and other factors discussed below, the industry requests that the Commission modify the test method specified in Section 1633.7 in the following respects:

- Section 1633.7 requires that the test be conducted with hoods on the burner apparatus. However, experience shows that such hoods are not always necessary. For this reason, the mattress industry requests that the provision be modified to require that the apparatus be hooded "when necessary."
- The industry has learned that all of the burners currently in use to test whether a given mattress meets the requirements of California Technical Bulletin 603 were inadvertently drilled with holes that are slightly larger than those specified in Section 1633.7. The circumstances of this error are described in the letter from Patricia A. Martin, Director, Sleep Products Safety Council to

Brian H. Stiger, Director, Bureau of Home Furnishings and Thermal Insulation, dated Mar. 24, 2005 (including statement from T.J. Ohlemiller, National Institute of Standards and Technology, dated Feb. 4, 2005) (attached hereto as Exhibit 4).

As the attached letter demonstrates, scientists with the National Institute of Standards and Technology have concluded that this difference in burner hole size will have no significant impact on whether a given test specimen will pass or fail the test. Since thousands of tests have already been conducted using the apparatus with the larger hole size and the larger hole size has no significant impact on the result of the test, the mattress industry requests that the Commission modify the hole size specified in the test method to conform with the size of the holes of the burners now in use. Otherwise, the industry would be required to incur millions of dollars to retest their products, expenditures that would in essence be wasted since the size of the burner holes would have no impact on the test results.

- Some mattresses have seamless edges. We urge the Commission to modify the burner placement requirements relative to the mattress edge to take into account mattresses with a seamless edge.
- Section 1633.11(a)(2) requires that if photos (and not video) are used to record the burn test, that such photos be taken at set intervals. The industry urges the Commission to specify these photo intervals in the test procedure itself to avoid oversight while the test is being conducted.
- As noted above in section 4(a) of these comments, some manufacturers offer for sale mattresses and foundations that are intended to be used either alone (in the case of the mattress being used either on the floor or on a surface other than a foundation) or with a mattress manufactured by a third party (for example, one manufacturer will offer an adjustable foundation that can be used with a mattress made by other manufacturers). As proposed, the test method requires that a mattress sold alone be tested on a metal frame that would have voids under it. Such an arrangement, however, does not reflect real world conditions, because a consumer is highly unlikely to use a mattress alone on such a frame. Instead, it would either place it on the floor or other rigid surface or use it on a foundation. We urge the Commission to modify the test method to allow for use of some form of material under a mattress when tested for use alone (i.e., without a foundation).

With regard to foundations manufactured by one company for use with a mattress made by another company, the test method as proposed does not contemplate testing of a foundation alone. We urge the Commission to modify its test method to take this situation into account.

Experience has shown that differences in temperature and humidity can have a significant impact on fire test results. Therefore, conditioning of the test specimens is critical to enhance the consistency of mattress fire tests without regard to variations in environmental conditions. The Commission should consider revising its proposed conditioning requirements in several respects. For example, we urge the Commission to raise the minimum temperature criteria to ambient room temperature and to narrow the humidity level range that is acceptable under the standard. The Commission should also consider setting requirements for air movement around the samples during the conditioning process (e.g., requiring that the specimens be placed on racks so that air can move around all surfaces during the conditioning process). Otherwise, the objectives of the conditioning process can be easily defeated if the specimens are simply stacked one on top of the other in the conditioning room.

The industry recognizes that modifications like these could raise lab test costs. To offset this effect, we believe that with narrower temperature and humidity levels and proper air movement during the conditioning process, the conditioning time can be safely reduced from 48 to 24 hours, which would help reduce the cost of product conditioning.

- The Commission should consider requiring that test facilities that conduct these tests be accredited or undergo certain mandatory minimum training programs.
- 7. The Commission Should State That the Flammability Standard Preempts Both Codified State Rules and Civil Claims Based on Common Law State Rules That Address the Same Risk of Injury.
 - a. The Commission Should Make Clear in the Standard That the Federal Mattress Flammability Standard Preempts State Statutes and Regulations That Also Address Mattress Flammability.

At the hearing, the mattress industry urged the Commission to be explicit in the text of the standard itself that the federal mattress standard preempts state requirements that also address mattress flammability risks. Such a statement is fully consistent with the requirements of the Flammable Fabrics Act, as well as the Commission's own regulations and its consistent interpretation of those authorities, which make clear that once the Commission has regulated the flammability of a given product, a state is preempted from imposing its own flammability rules with regard to the same product absent the Commission exempting that state requirement from federal preemption.

Nevertheless, we pointed out that bills pending in several state legislatures would set separate – and potentially conflicting – flammability requirements for mattresses and foundations. A clear statement by the Commission within the text of Part 1633 itself will

help remove doubt that future state legislative and regulatory efforts to regulate the flammability of mattresses are preempted.

b. The Commission Should Also Acknowledge That its Standards Can Preempt Common Law Rules.

Judicial decisions over the past 13 years in civil litigation involving federal safety standards issued by the CPSC and a number of other federal agencies state that those federal standards can preempt certain state common law claims. Consistent with these precedents, the mattress industry requests that the Commission state that a manufacturer's compliance with the federal mattress standard preempts civil litigation based on common law rules that address the same risk of injury. We ask that the Commission make this statement either in the text of Part 1633 itself or the analysis of the public comments accompanying the final version of the standard.

The statutory basis for the recent precedents involving Commission safety standards is a set of preemption provisions enacted in 1976 in four laws administered by the Commission: the Flammable Fabrics Act ("FFA"), the Consumer Product Safety Act ("CPSA"), the Federal Hazardous Substances Act ("FHSA"), and the Poison Prevention Packaging Act ("PPPA"). The FFA provision – which would be relevant to the federal mattress flammability standard – reads as follows:

Standards or regulations designed to protect against same risk as State standards or regulations; identical State standards

Except as provided in subsections (b) and (c) of this section, whenever a flammability standard or other regulation for a fabric, related material, or product is in effect under this chapter, no State or political subdivision of a State may establish or continue in effect a flammability standard or other regulation for such fabric, related material, or product if the standard or other regulation is designed to protect against the same risk of occurrence of fire with respect to which the standard or other regulation under this chapter is in effect unless the State or political subdivision standard or other regulation is identical to the Federal standard or other regulation.

15 U.S.C. § 1203(a) (2005).

In discussing its reasons for enacting these provisions, Congress declared its intent "[f]or the first time . . . [to] provide a uniform Federal preemption clause" for the CPSC-administered laws noted above. S. Rep. No. 251, 94th Cong., 2d Sess. 4 (1976), 1976 U.S.C.C.A.N. 993, 996. Congress believed that the process set by the 1976 amendments would help set uniform national standards that states could enhance if they persuaded the CPSC that the state standard would protect consumers to a significantly higher degree than the federal standard without unduly burdening interstate commerce. As such, Congress stated that "[t]his preemption scheme is designed to meet the competing interests of those who view Federal requirements as merely minimum standards and those who would opt for uniform national requirements." *Id*.

Following the U.S. Supreme Court's decision in Cipollone v. Liggett Group, Inc., 505 U.S. 504 (1992) (holding that the Federal Cigarette Labeling and Advertising Act expressly preempted plaintiff's failure to warn and some fraudulent misrepresentation claims against a tobacco company defendant), lower federal courts have found that a number of CPSC standards preempt state common law product liability claims. For example, in Moe v. MTD Products, Inc., 73 F.3d 179 (8th Cir. 1995), plaintiff claimed that a lawn mower manufacturer had not adequately warned users that the control cable for the blade brake/clutch system ("BBC System") on a power mower might fray and that the BBC System itself was negligently designed. Prior to the accident, the Commission had promulgated a lawn mower standard under the CPSA, which required that lawn mowers bear a specific label and permitted manufacturers to use either of two safety systems, one of which was the BBC. The defendant manufacturer's product warning complied with the Commission's labeling requirements.

In light of the CPSA's preemption clause, the Commission's labeling requirements and design standard, and the defendant manufacturer's compliance with that standard, the Eighth Circuit held that plaintiff's common law failure to warn claims were precluded. Noting that "[o]ne purpose of the CPSA is to 'develop uniform safety standards for consumer products and to minimize conflicting state and local regulations," 73 F.3d at 183 (quoting 15 U.S.C. § 2052(b)(3)), the court found plaintiff's failure to warn claims were preempted by defendant's compliance with the CPSC's labeling requirements. The court also concluded that a claim that defendant negligently chose the BBC system over the alternative system was preempted because that option was clearly authorized by the CPSC standard. 73 F.3d. at 181 n.3. Nevertheless, the Court held that a plaintiff could legitimately question whether the BBC system itself was properly designed in order to "ensure that the federal standard has meaning." *Id.* at 183.

A federal district court reached the same conclusion in another mower case involving failure to warn claims. Cortez v. MTD Products, Inc., 927 F. Supp. 386 (N.D.Ca. 1996).

In interpreting the CPSA preemption clause, the courts have also analyzed several related issues. For example, express preemption would apply only to products made after the effective date of a standard. *Hittle v. Scripto-Tokai Corp.*, 166 F.Supp.2d 142 (M.D. Pa. 2001) (CPSC's lighter standard did not preempt plaintiff's common law claims because the lighter that allegedly caused the fire was manufactured before the standard's effective date). Likewise, the clause would not preclude claims based on a manufacturer's failure to comply with a standard. *Leipart v. Guardian Industries, Inc.*, 234 F.3d 1063 (9th Cir. 2000).

A subsequent Supreme Court decision in Geier v. American Honda Motor Co., Inc., 529 U.S. 861 (2000), indicates that the CPSA preemption holdings may be wrong. In Geier, the court considered an auto restraint standard issued under the National Traffic and Motor Vehicle Safety Act, which contained both a preemption clause similar to the FFA

preemption clause quoted above¹ and a "savings clause" which stated that "[c]ompliance with" a federal safety standard "does not exempt any person from any liability under common law." 15 U.S.C. § 1397(k) (1988 ed.). The Supreme Court held that the savings clause precluded a finding that the safety standard expressly preempted plaintiff's state common law claims, but ruled that plaintiff's claims were nevertheless impliedly preempted by the federal standard.

Like the statute in *Geier*, the CPSA contains **both** a preemption clause and a savings clause. As a result, federal courts have held that "[t]he analysis set forth in *Geier* makes clear that the presence of the saving clause in the CPSA eliminates a broad reading of the preemption provision to include common law claims." *Colon ex rel. Molina v. BIC USA, Inc.*, 136 F.Supp.2d 196, 205 (S.D.N.Y. 2000).²

Nevertheless, other Commission-administered standards do not suffer from these limitations identified in *Geier*. For example, the FFA and FHSA contain no savings clause and federal courts have not been reluctant to find state common law claims preempted in cases involving Commission standards issued under those statutes. For example, in *Milanese v. Rust-Oleum Corp.*, 244 F.3d 104 (2nd Cir. 2001), plaintiff was severely burned when vapors from metal primer in a properly labeled container were ignited by a nearby wood-burning stove. Plaintiff sued based on warranty, strict products liability, and negligence claims against the primer manufacturer, alleging failure to warn. The Second Circuit held that plaintiff's claims were preempted to the extent they sought to impose on the manufacturer labeling requirements in addition to those set by the Commission under the FHSA. Nevertheless, it recognized that a state cause of action alleging non-compliance with the FHSA would not be preempted. *Id.* at 109-110. *Accord Kirstein v. W.M. Barr & Co.*, 983 F. Supp 753, 761 (N.D.III.1997).

Other courts have likewise found common law failure to warn claims preempted by the FHSA:

- Comeaux v. National Tea Co., 81 F.3d 42 (5th Cir. 1996)
- Moss v. Parks Corp., 985 F.2d 736 (4th Cir. 1993)
- Lee v. Boyle-Midway Household Products, Inc., 792 F. Supp. 1001 (W.D. Pa. 1992)

¹ The preemption provision at issue in *Geier*, which was formerly codified at 15 U.S.C. § 1392(d) (1988 ed.), provided that:

Whenever a Federal motor vehicle safety standard established under this subchapter is in effect, no State or political subdivision of a State shall have any authority either to establish, or to continue in effect, with respect to any motor vehicle or item of motor vehicle equipment[,] any safety standard applicable to the same aspect of performance of such vehicle or item of equipment which is not identical to the Federal standard.

However, in a more recent cigarette lighter case, the Supreme Court of Mississippi (citing *Geier*) ruled that plaintiff's claims were impliedly preempted by the Commission's lighter standard (although the court did not consider the impact of the CPSA savings clause on its analysis). *Frith v. BIC Corp.*, 863 So.2d 960 (Miss. S.Ct. 2004).

- Busch v. Graphic Color Corp., 662 N.E. 2d. 397 (S.Ct. Il. 1996)
- Jenkins v. James B. Day & Co., 634 N.E.2d 998 (S.Ct. Oh. 1994)
- State ex rel. Jones Chemicals, Inc. v. Seier, 871 S.W.2d 611 (Ct. App. Mo. 1994)

Likewise, in *Brazier v. Hasbro, Inc.*, 2004 WL 515536 (S.D.N.Y. 2004), Prod. Liab. Rep. (CCH) ¶ 16,835 (not reported in F.Supp.2d), the court held that the preemption clause enacted in 1994 in the Child Safety Protection Act ("CSPA")³ – which the court stated "tracks the language of the preemption provision in the FHSA" and is also administered by the Commission – preempted plaintiff's warning claims. *Accord West v. Mattel, Inc.*, 246 F.Supp.2d 640 (S.D. Tex. 2003).

Milanese, Brazier and West are particularly relevant because they were decided after Geier. They demonstrate that Commission standards issued under statutes like the FHSA and the CSPA that contain no savings clauses continue to preempt state common law claims even after Geier.

c. Court Decisions Under the Flammable Fabrics Act Preemption Provision Finding No Preemption Are Distinguishable From the Circumstances of the Mattress Standard.

We have identified no reported decisions under the FFA that have found a plaintiff's claims preempted by a Commission-issued flammability standard. However, the reported FFA decisions that have found no preemption involved circumstances that are easily distinguishable from those relevant to the proposed mattress flammability standard.

The leading case under the FFA is Wilson v. Bradlees of New England Inc., 96 F.3d 552 (1st Cir. 1996), cert. denied 519 U.S. 1149 (1997), which involved a child injured by burning clothing that complied with a garment flammability standard administered by the Commission. The defendant argued that plaintiff's claims were precluded by the FFA's preemption clause.

The First Circuit considered the text of the FFA preemption clause, its legislative history and policy arguments favoring and opposing federal preemption in light of recent Supreme Court decisions in *Cipollone* and *Medtronic, Inc. v. Lohr*, 518 U.S. 470 (1996) (ruling that FDA-administered medical device standards can preempt certain state common law product liability claims). The Second Circuit concluded that there was "no inescapably 'right' answer" to whether the clause preempted Wilson's claims. 96 F.3d at 556. Nevertheless, the Court declined for several reasons to find plaintiff's claims

³ That provision, codified at 15 U.S.C. § 1278 Note "Preemption," states:

[[]A] State or political subdivision of a State may not establish or enforce a requirement relating to cautionary labeling of small parts hazards or choking hazards in any toy, game, marble, small ball, or balloon intended or suitable for use by children unless such requirement is identical to a requirement established by amendments made by this section to the Federal Hazardous Substances Act or by regulations promulgated by the Commission.

preempted. The court was particularly concerned that the garment standard at issue was over 40 years old, having been developed in 1953 by the textile industry. The Commission's predecessor agency, the U.S. Department of Commerce, had accepted the standard without meaningful consideration or review. Finally, once responsibility for administering the standard had transferred to the Commission, the standard had not been updated at the time of the fire⁴ Although the court considered the preemption issue a close call, it ruled that preempting plaintiff's claims was inappropriate under these circumstances.

The Wilson court's policy concerns with the 1953 garment standard do not apply to the open-flame mattress standard that the Commission is now promulgating. Unlike the 40-year old garment standard, the mattress standard will be the "state of the art" result of intense agency involvement over a multi-year period that will have benefited from extensive participation from numerous interested parties. Consequently, given the consistent preemption rulings in cases involving Commission-administered standards issued under other statutes (e.g., the FHSA and the CSPA) and Congress' intention that the 1976 preemption clauses be applied uniformly, it is likely that a court would find that the new open-flame mattress standard that the Commission has proposed would preempt design claims that a future plaintiff might assert against a manufacturer that has complied with Part 1633.

The Supreme Court's preemption rulings since 1992 provide further support for this conclusion. The Court has been increasingly expansive in terms of which statutory words in a given preemption clause are sufficient for it to find that a federal safety regulation preempts a plaintiff's state common law claims. Starting with "no requirement or prohibition" in *Cipollone*, the acceptable terms have grown to include "a requirement" in *Lohr*, "safety standard" in *Geier*, and "a law, regulation, or order" in *Norfolk Southern Ry. Co. v. Shanklin*, 529 U.S. 1467 (2000) (holding that when railway-highway safety devices were federally funded and installed in accordance with applicable federal regulations, plaintiff's state common law negligence claims about the devices' inadequacy were preempted).

The phrasing used in the FFA of "a flammability standard or other regulation" is similar to comparable terms used in other preemption provisions that the Court has found to preempt state common law claims.

⁴ Other courts considering the preemptive effect of the 1953 garment standard on state common law claims have reached the same result, often citing *Wilson*. See e.g.:

Pack by Soja v. E.R.O. Industries, Inc., 669 N.Y. S.2d 995 (N.Y. App. Div. 1998)

Davis v. New York City Housing Authority, 668 N.Y.S.2d 391 (N.Y. App. Div. 1997)

Perez v. Mini-Max Stores, Inc., 661 N.Y.S.2d 659 (N.Y. App. Div. 1997)

O'Donnell v. Big Yank, Inc., 696 A.2d 846 (Pa. Sup. Ct. 1997)

Askenazi v. Hymil Mfg. Co., Inc., 648 N.Y.S.2d 895 (N.Y. Sup. 1996) (noteworthy because it
interprets 1976 replacement of 1967 FFA preemption clause using term "law" with "flammability
standard or other regulation" as indication that Congress intended to restrict preemptive scope to
inconsistent state statutes or administrative promulgations, not common law)